JARBIDGE RIVER POPULATION OF BULL TROUT — TRULY THREATENED?

OVERSIGHT FIELD HEARING

BEFORE THE

COMMITTEE ON RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTH CONGRESS

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C O N T E N T S

	Page
Hearing held on July 27, 2002	1
Statement of Members:	
Gibbons, Hon. Jim, a Representative in Congress from the State of Nevada	1
Prepared statement of	8
Statement of Witnesses:	
Brackett, Bert, Cattle Rancher, Flat Creek Ranch, Rogerson, Idaho	52
Prepared statement of	53
Carpenter, Hon. John C., Assemblyman, Nevada State Assembly	14
Prepared statement of	16
Murphy, Dennis D., Professor, Department of Biology, University of Nevada-Reno	44
Prepared statement of	47
Roberts, Brad, Chairman, Elko County Board of Commissioners	10
Prepared statement of	11
Trafton, Stephen D., Western Native Trout Program, Trout Unlimited (California Chapter)	49
Prepared statement of	50
Vaught, Robert L., Forest Supervisor Humboldt-Toiyabe National Forest, Forest Service, U.S. Department of Agriculture	26
Prepared statement of	28
Weller, Gene, Deputy Administrator, Nevada Division of Wildlife, Nevada Department of Conservation and Natural Resources	39
Prepared statement of	41
Williams, Robert D., Field Supervisor, Nevada Fish and Wildlife Office, Fish and Wildlife Service, U.S. Department of the Interior	20
Prepared statement of	23

OVERSIGHT FIELD HEARING ON JARBIDGE RIVER POPULATION OF BULL TROUT — TRULY THREATENED?

Saturday, July 27, 2002
U.S. House of Representatives
Committee on Resources
Elko, Nevada

The Committee met, pursuant to call, at 1:03 p.m., at the Elko Convention Center, 700 Moren Way, Elko, Nevada, Hon. Jim Gibbons presiding.

STATEMENT OF THE HON. JIM GIBBONS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEVADA

Mr. GIBBONS. The Committee on Resources hearing will come to order.

I'm Jim Gibbons, your Congressman from the Second District of Nevada, and I want to welcome all of you here, and I personally want to thank all of you for coming out today on a Saturday to attend what I think is going to be a very important hearing.

As a member of the House Resources Committee, I'm honored to bring this field hearing to Elko, and I do apologize for myself and no one else from the Resources Committee being here, but that's because we finished our work in Washington, D.C., this morning at 4 a.m., and on the way to the airport at 5 this morning, many of the other members had indicated that their flight schedules and their hearing schedules were so turned around by the lateness of last night's hearing or this morning's hearing that they were unable to be here. So I want to say that simply because I'm the only one here, I can assure you that all of the records and comments of the testimony will be on the record, and it's going to be easy for me because I don't have to yield to any other Congressman to ask questions. I get to share the whole day with you.

But let me say that Elko is the perfect choice for this hearing. It is going to be a hearing on the Endangered Species Act. And Elko in particular is special to me. Not only because it's an important part of the Second Congressional District which I have had the privilege to represent for the last 6 years, but it's also because I believe that Elko is God's country, and it is just an extreme pleasure for anybody to visit and for me to come here and have one of these hearings. It's a great honor to be away from Washington, D.C.

Actually it's my opinion that the farther away you get from Washington, the more common sense you can have in discussion on any subject. And that's important.

But in all seriousness, having the witnesses and other interested parties in attendance here today I think speaks volumes for the dedication of your community and the State of Nevada as well. This is a beautiful Saturday, and I want to get right down to business so that we can finish this hearing in a reasonable amount of time and that each of you can still get out and hopefully enjoy some part of your Saturday and your weekend.

Let me begin by telling you what the overview of what we're going to do here today is, and then we'll get on with it. What I plan to do is read my opening remarks here. I'm going to go through a little bit of a Power Point presentation, and that's why we set it up here on the screen for you, to give you a little better insight, a little better education, kind of an ESA 101 course to let you have a better idea of what is happening with the Endangered Species Act, what is happening in particular with reference to the bull trout and the ESA.

Let me start with a little history in my remarks because it goes all the way back to 1973, and that is when Richard Nixon signed the Endangered Species Act into law, and I think then the intent of the ESA, and I will quote, was to "conserve ecosystems upon which endangered species depend and to provide a program to conserve such species." since that time the United States has witnessed the listing of over 1200 animals and plants as threatened or endangered by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. A majority, a vast majority, a large percentage of that number are out West.

Unfortunately, the ESA, or Endangered Species Act, and if I say this acronym ESA, I mean Endangered Species Act, has not been so much a safety net for endangered species at or approaching the edge of extinction as it has been a primary land management tool in the hands of regulatory agencies.

I don't believe it was ever the intent of Congress to provide the Fish and Wildlife Service or the degree of control it wields over public land management, agencies, and private landowners today that it has, and it certainly was never the intent of Congress to vest this power in the hands of very few people.

The Jarbidge population of the bull trout listed as threatened by the U.S. Fish and Wildlife Service on March 30th of 1999 is a case in point of how ESA's sword is sometimes wielded in isolated western watersheds. The question regarding the success of the Endangered Species Act will be judged historically on the validity of the species that were listed.

This hearing today is one of a series of hearings by the House Resources Committee. We have spent much of the 107th Congress looking at how the ESA requirement to make determinations on the basis of whether the best scientific and commercial data has been interpreted by the regulatory agencies as reflected in listing and consultation decisions, and while erring on the side of conservation is prudent, philosophical guidelines for decisionmakers charged with the survival of the species can sometimes be an over-

zealous use or abuse of the flexibility that is intrinsic to this philosophy, and that is a concern of all of us.

We have heard it said that the South Canyon Road issue was a primary impetus for this listing. I, too, was troubled by the sequence of those events. But please note we are here today to talk about the motives for the listing, but the basis for the documenting in the listing rule, and this is our primary purpose, not necessarily to talk about the Jarbidge Road or the South Canyon Road.

We want to see if the decision to list the bull trout was based solely on the best available scientific data as is required by the Endangered Species Act and if that data is science based or more in the realm of speculation or opinion.

We also want to hear what some of the latest science may be on the Jarbidge population, what criteria must be met to delist the specific bull trout population, and to determine whether we are in a position to proceed toward delisting.

I'm also very interested to hear from our local officials and impacted residents of the Jarbidge watershed area, and Elko County in particular, their stories, and their stories are no less important than our discussion of good science. Responsible environmental stewardship can go hand in hand with meeting society's needs.

I want to thank everyone for being here this morning, and I also want to point out something. It's taken a tremendous amount of work putting this hearing on, and I appreciate the interest shown by the number of people who have turned out for this hearing today. Because this is an official Congressional hearing as opposed to a townhall meeting, we have to abide by certain rules of the Committee and of the House of Representatives. So we kindly ask that there be no applause of any kind or any kind of demonstration with regard to testimony.

It is important that we respect the decorum of the House rules and the rules of the Committee, and I look forward to this hearing from the panel of witnesses today. Let me remind the witnesses that under our Committee rules, they must limit their oral statements to 5 minutes, but that their entire statement will appear in the record.

We will also allow the entire panel to testify before questioning the witnesses, and I would like to recognize—before I recognize the first panel, what I would like to do is take a moment and go through this Power Point briefing to sort of give you the lay of the land, and as I said, Endangered Species Act 101 course that might help you better understand what takes place and how it has affected you in particular in Elko County with the bull trout.

So first slide. What's important is to look at the chronology of the listing of the bull trout. In November 1st of 1994, a group called Friends of the Wild Swan brought a lawsuit to force the Fish and Wildlife Service to list various members of various species including the bull trout as endangered. The Fish and Wildlife Service then determined that while it may have been ripe for consideration, that they had other things to do, and therefore, in '96, the Oregon District Court directed the Fish and Wildlife Service to go back and reconsider that. In other words, moving their—forcing their decision out rather than allowing for them to look at other areas.

March 13th of '97, they came out with a proposed rule, but it did not list the bull trout. Therefore, in April of '97, the Court ordered the Fish and Wildlife Service to go back and reconsider their decision, and in June of '97, a proposed rule by the Fish and Wildlife Service came out again but did not list the bull trout.

So therefore, in December of '97, the court ordered them again to reconsider what they had done. And in '98, a proposed rule finally came out after 4 years of being pushed by the courts to list the bull trout. And they came out with a proposed rule in 1998. In August of '98, they gave a 240-day emergency listing. This was probably precipitated by the road issue that we talked about earlier.

In March 30th of 1999, the Fish and Wildlife Service finally listed the bull trout as threatened.

That's the chronology of where we are and how we got to where we are today. Let me give you some definitions that might help you. The DPS is another acronym for distinct population segment. Metapopulation is the interaction or the interacting network of local populations of fishes that may be different but they do interact.

A nodal is the seasonal migration area, probably the lower point along the stream where fish migrate up and down, and then you get to a focal point, which is the upper colder part of the water where spawning usually takes place. When you hear those areas and you get to migratory versus resident, bull trout are migratory in their adult stage, they are not necessarily a resident fish, but they do migrate and have spawning in the upper areas in the colder waters.

To look at the basis for a threatened listing fish is the purpose of this hearing, so the rule and issue of the Fish and Wildlife Service is what we're going to talk about today.

Next. Here are some of the questions we want to ask. Was the decision based on the best available scientific data? Is there any new information which might help us make that decision? And what is the criteria needed and necessary to delist? And what further information is needed if we don't have it? What would be a recovery program or what would one look like if we had one?

And the questions we're not asking, almost as important. What was the motivation behind the listing? We don't want to get into that. And is the South Canyon Road Federal or county? That is outside of the purview of this hearing today.

And is the Nevada Department of Wildlife report on the bull trout based on best available science? We're not going to talk about what Nevada did. We're going to talk about what the Federal Fish and Wildlife Service did.

Here is our ESA 101. Remember I said there were 1200 species listed, approximately 1200 around the United States. But only 11 of those 1200 have ever been delisted. And the evidence of program failure or success is one of the questions. Because the purpose of the ESA to bring species back from the edge of extinction and get them off of the Endangered Species Act listing. That is the purpose of the Act.

So those decisions to list the species must be made by this criteria and this criteria alone, and that is solely based on the basis of the best scientific and commercially available data.

Is there too little data? Well, the Fish and Wildlife Service—when there is too little data, let's look at this. Here is what the Fish and Wildlife Service handbook says. You got to give the benefit of the doubt to the species. And the conference report number 697 of the 96th Congress says that the best information available language was to give benefit of the doubt to the species.

The problem is that gives too much control with vague language when you say the benefit of the doubt to very few people who make these decisions.

And that's why we're coming and working on the Hansen bill which is designed to improve the language of the Endangered Species Act so that it works to do what the intent was, to bring species back. Because when you have 11- or 1200 species out there, with the label endangered or threatened, and you do nothing—for example, there's been a 4-year hiatus since the listing of the bull trout, and we still don't have a plan to delist them, a plan to bring them back from extinction. That tells me that we either have too much focus on listing plants and not enough focus on getting them off, getting them back from the brink of extinction.

Court decisions. Well, here are some recent court decisions that will talk you through all of the concerns that have been brought up. First of all, agencies are not obligated to conduct studies to obtain missing data. Agencies cannot ignore available information.

Congress, the intent is that the Fish and Wildlife Service take conservation measures before a species is conclusively headed for extinction. And the Service must utilize the best scientific data available, not the best scientific data possible.

The bar that the Fish and Wildlife Service has to clear in terms of listing, in terms of evidence is very low, but it must at least clear some evidentiary purpose in order to list it.

The mere speculation as to the potential for harm is not sufficient.

Those are court rulings. They are very important and very significant on how they apply to the decision to list a species.

Now, H.R. 4840, which is what we're talk working on, is called the Sound Science for Endangered Species Act Planning Act of 2002. There is a preference in the Act for empirical, field tested, and peer reviewed data. Any scientist will tell you this is the standard by which they judge scientific data on making any decision.

The endangered or threatened determination is due to one or more of five factors: 1, the present or threatened destruction, modification, or curtailment of its habitat or range; 2, overutilization for commercial, recreational, scientific or educational purposes, disease or predation; the inadequacy of existing regulatory mechanisms—and we'll talk about all of these—and other natural and man-made factors affecting its continued existence.

Now, here is Fish and Wildlife listing bases. The present or threatened destruction, modification or curtailment of its habitat or range; stream temperatures—and here is where we get into the decision why we're here—stream temperatures are likely—that's not

sound, that's not definitive, just a vague it is likely—likely to be elevated by past forest practices. They have no data, but that's the reason, one of the reasons why they listed it.

Sediment from road work is likely still impacting habitat. Yet they have no data on doing that.

Road maintenance practices continue to impact habitat. Well, they have not studied it, there is no data.

Grazing effects are minor and localized. So grazing was actually taken out of the picture because its impacts are minor and localized, and it did not pertain to the listing of the bull trout.

Concern over mine adit discharges or mine tailings may be the source of problems. Those last two. There is no data on that. Nothing was studied, nothing was brought out to list that information, no empirical study, no data.

The only migration barrier identified has been fixed. They put a ladder in there and found now bull trout migrating beyond the ladder. So they found that the fish do migrate. So the last one, the migration barrier has been taken care of.

And water temperature is likely a barrier. Although water temperature data is missing. There is no water temperature data.

Now this is the Federal Fish and Wildlife Service.

Overutilization for commercial, recreational or scientific or educational purposes. Ambiguous, it's ambiguous on illegal harvest and incidental take. State scientific collection requirements are minimal.

Disease or predation. Diseases are not thought to be a factor. Rainbow trout are again likely negatively affecting bull trout. No data. It's just a speculation. It's likely that it will affect the bull trout.

The inadequacy of existing regulatory mechanisms. Poorly engineered roads and irresponsible maintenance practices. Bull trout task force did not produce a plan. Four years later.

Other natural or man-made factors affecting its continued existence. Small isolated populations are susceptible to natural events.

Every population in the world, you and I. Dinosaurs were subjected to this same problem. A meteoric impact can eradicate a population. A forest fire in the area, sediment runoff after the forest fire, plugging or choking the stream off, would dramatically affect that population. So every population has that same, whether it is a large or small, isolated, but even isolated small populations.

What some scientists are saying who have reviewed all of the peer data. Let's go through some of their comments.

Tom McMahon, a known biologist scientist and environmental extinction scientist said isolation from other species and small population size is significant. The Nevada Department of Wildlife data is questionable because of the way it was collected and extrapolations that they made from that data.

Adequate population trend data is not available. So no one has studied the population trend over a long enough period of time to give you a sort of indication whether the population is decreasing or rising.

The Bitterroot, Montana, bull trout, which is a similar bull trout, is isolated, it's a remnant fish, but it was abundant before 1930.

Here is the American Society of Fisheries review of the data, what they say. Nevada data has problems, as we just talked about. It is estimated—they estimate, they have drawn some conclusions, they estimate 629 of these bull trout are in the west fork of the Jarbidge River. They give some ratio, and I'm not sure how they calculated it out, but they say there is .026 fish per mile—I think that is mile; maybe meter—it puts population in the high risk category. So it is small numbers there.

The high probability of extinction is significant if the population is less than 2,000 fish. There is a 20 percent probability of persistence. That means there is a one in five chance if we do nothing the fish are going to survive. There is a four in five chance that this fish because of its small population, small—or it has a high probability of extinction because of its population and small numbers. Four and five says that it will not survive no matter what you do.

The effective population of 19 to 64 fish, and that's far below the 500 needed that they say is necessary for the bull trout to succeed.

Here we go again. Here is the reviewer number 2 from the same American Society of Fisheries. No evidence of interaction of subpopulations. That means these fish have different little schools of populations that migrate and interact up and down the stream area. And the focal distribution is small, making even protected areas vulnerable to stochastic events. Those are monumental events that take place, as we talked about.

Dunham, another scientist, minimum population science, extinction risk is now moderate to high because of the population. Isolation of populations, extinction risk moderate to extreme. The replication populations, extinction risk moderation to extreme. Replication is those fish that are capable of reproducing and being able to sustain a population.

There is no basis to assume that the population is at capacity for the system. Although Nevada, on the other hand, believes that because of the environment and because of the ecosystem and the habitat for the bull trout, that its population size today is pretty much governed by the environment, size of the stream and the habitat for it. In other words, it would be larger if it had the available habitat to do that, and if it were less, it would be smaller.

Preliminary evidence suggests that subpopulations are not metapopulations. Subpopulations and metapopulations means they are interacting.

Greg Watson, Fish and Wildlife Service. Assume that bull trout historically distributed more widely. Bull trout is a "K", a predatory species of fish. Numbers never were high. That's what they are saying.

Large enough basin to be self-replicating.

Catastrophic events have always happened, migratory feature is a recovery mechanism. In other words, if you have a fire at some point in the stream, fish will migrate one side or the other, and as soon as the sediment clears out of the stream they will migrate back up and they will recover, but their migratory instincts to move away from where the environment is not suitable for them is a recovery mechanism that is instinctive to the fish.

The bull trout are particularly selective in their requirements. Yes, they are. They have to have cold water.

And population numbers have high magnitude of variability. In other words, when we looked at some of the numbers there is an assumption there is 629 bull trout. I don't think they went out and counted every one, but they have a high number of variability between the numbers that they can count.

Don Chapman, another scientist, said the strongest case is for cataclysmic events. We talked about that. If a meteor strikes the Jarbidge area, guess what, folks? Not only will the bull trout be gone, we will probably all be gone.

Speculates that species had a much larger range. That's what he is saying. That is just speculation that it had a much larger range.

So in conclusion what we can say is that adequate data is lacking for this listing. The genetic data is lacking, the population trends haven't been studied, habitat needs have not been detailed. What we need to do is do a more intensive study of the fish either before you list it or after it is listed to figure out how to get it unlisted.

That is the basic premise of where we are today. That's your ESA 101 course, ladies and gentlemen. And as I said, monitoring is needed, and I believe the issue today is, was the best scientific data used to make this determination, and that's what we will find out today.

[The prepared statement of Mr. Gibbons follows:]

Statement of Hon. Jim Gibbons, a Representative in Congress from the State of Nevada

Ladies and Gentlemen, thank you for being here today for this important hearing. As a member of the House Resources Committee, I am honored to bring this field hearing to Elko, Nevada.

Elko is a special community for me—not only because it lies within the Second District of Nevada—which I have had the privilege of representing in Congress for the last 6 years—but also because I consider this God's country. Also, it is my opinion that the further away we get from Washington, D.C. ... the more common sense we can interject into this discussion. But, in all seriousness, having our witnesses and other interested parties in attendance today speaks volumes of your dedication to this community—and to the State of Nevada.

It is a beautiful Saturday—I want to get right down to business so that we can finish this hearing in a timely and productive manner—and so that each of you can get out and still enjoy the rest of your weekend.

In 1973, President Richard Nixon signed the Endangered Species Act into law. The intent of ESA is to "conserve ecosystems upon which endangered species depend and to provide a program to conserve such species." Since that time, the United States has witnessed the listing of over 1,200 animals and plants as Threatened or Endangered by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. As of this time last year, only 11 species had been de-listed due to recovery.

This alone begs the question: Do we use these 11 species as evidence that ESA has failed?...Or, do we judge the success of the program on the number of listed species that still have intact populations? The answer to that question partially depends on whether one believes that the listed species were truly threatened or endangered to begin with!

Unfortunately, the ESA has not been so much a safety net for endangered species at or approaching the brink of extinction...as it has been a primary land management tool in the hands of the regulatory agencies.

It was never the intent of Congress to provide the U.S. Fish and Wildlife Service the degree of control it wields over public land management agencies and private land owners today. And, it certainly was never the intent of Congress to vest this power in the hands of so few.

While Army Corps of Engineers aluminum-sulfate laden sludge still continues to be pumped into the Potomac River along Washington D.C., unhindered by ESA restraints, U.S. Fish and Wildlife Service and National Marine Fisheries Service continue their assault on the West.

The Jarbidge population of bull trout, listed as threatened by the U.S. Fish and Wildlife Service on March 30 of 1999, is a case-in-point of how the ESA sword is sometimes wielded in isolated western watersheds. The question regarding the success of the Endangered Species Act will be judged historically on the validity of the species that were listed.

This hearing today is one in a series of hearings by the House Resources Committee. We have spent much of the 107th Congress looking at how the ESA requirement to make determinations on the basis of whether the "best scientific and commercial data" has been interpreted by the federal regulatory agencies as reflected in listing and consultation decisions.

While erring on the side conservation is a prudent philosophical guideline for decision-makers charged with the survival of species, overzealous use...or abuse...of the flexibility intrinsic to this philosophy is a real concern.

We have heard it said that the South Canyon Road issue was a primary impetus for this listing. I too was troubled by the sequence of events.

But—please note—we are not here today to talk about the motives for the listing...but the basis for it, as documented in the listing rule. This is our primary purpose.

We want to see if the decision was based "solely on the best available scientific data" as is required by the Endangered Species Act...and if that "data" is science-based or more in the realm of speculative opinion.

We also want to hear what some of the latest science is on the Jarbidge population; what criteria must be met to de-list this specific bull trout population; and, determine whether we are in a position to proceed toward de-listing.

I am also very interested to hear from our local officials and impacted residents of the Jarbidge watershed and Elko County. Their stories are no less important than our discussion of good science. Responsible environmental stewardship can go hand-in-hand with meeting society's needs.

The scales are currently tipped against any economic development which improves quality of human life.

They are tipped against economic development that also provides a capacity for environmental stewardship unavailable in other parts of the world.

Returning to a balance includes shedding light on the doomsday litany and exaggerations of the environmental movement.

Decisions that disregard science will never stand the test of time.

I want to thank everyone for being here this morning, and I also want to point out something. It's taken a tremendous amount of work putting this hearing on, and I appreciate the interest that is shown by the number of people who have turned out for the hearing today. Because this is an official Congressional hearing, as opposed to a town hall meeting, we have to abide by certain rules of the Committee and of the House of Representatives. So we kindly ask that there be no applause of any kind or any kind of demonstration with regards to the testimony.

It is important that we respect the decorum and the Rules of the Committee. I look forward to hearing from the panels of witnesses today. 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.

I would like to recognize our first panel of witnesses.

With that, let me turn to our first panel and you don't have to listen to me any more. I'm going to turn to panel one, which is Brad Roberts, Chairman of Elko County Board of Commissioners, and John Carpenter, Assemblyman for the State of Nevada Assembly, and those two, if you would come up, gentlemen, and take a seat.

Gentlemen, while you are being so kind to come, and remember, we have a limited timeframe and a number of panels to get through, and I took more time than I needed. And so I ask you to be succinct, to the point. Your full and complete recorded testimony will be entered into the record, and if you could summarize it, it would be all the better.

Who would like to start?

Mr. ROBERTS. I can start.

Mr. GIBBONS. Beauty over age. Just kidding, Brad.

STATEMENT OF BRAD ROBERTS, CHAIRMAN, ELKO COUNTY BOARD OF COMMISSIONERS

Mr. ROBERTS. OK. My testimony actually runs about 5 minutes 12 seconds, if I could be allowed the additional 12.

Mr. GIBBONS. Go for it. I'll give you the extra 12.

Mr. ROBERTS. Congressman Gibbons and Members of the Panel, thank you for the opportunity to present testimony at this important hearing. I am Brad Roberts, Chairman of the Elko County Board of Commissioners. My testimony today will address the social and economic impacts of the listing of the Jarbidge river population OF bull trout.

It is not possible today for me to provide you with the actual dollar impact this listing has had on the town of Jarbidge or our county. Jarbidge, Nevada, is one of the most remote towns in the lower 48 states. The town's business is comprised of bed and breakfasts, one bar-restaurant, a general store, and a gasoline station. In addition, two outfitters conduct business in the Jarbidge Mountains.

The Jarbidge area is renowned for its Class 1 airshed, scenic beauty and numerous outdoor recreation opportunities. The key to the pleasurable experience of these visitors is access to the forest system lands in the area. In turn, these visitors are key to Jarbidge economic well being.

A General Accounting Office report issued in April 1999 identified the Jarbidge area as one with high potential of catastrophic fire. If a fire were to begin south of the town of Jarbidge, it would at the very least inhibit visitors from spending time in the area due to the diminished recreational opportunities and scenic values. In the worst case, the town of Jarbidge could be destroyed.

The listing of the bull trout has prevented Nevada Division of Wildlife from stopping sport fishing in Jarbidge River. As the fishing experiences diminished by the lack of stocking, fewer anglers will visit Jarbidge, which reduces the revenue of the town's businesses.

According to an Environmental Assessment prepared by the Forest Service in 1998, there are six fewer campsites available in the canyon than there were before the 1995 flood that damaged South Canyon Road. The lack of campsites undoubtedly has reduced the number of camping visitors, and dispersal of forest visitors is hampered by the lack of suitable campsites resulting in overuse of the remaining facilities, some of which include toilets which cannot be serviced and certainly create a greater environmental concern than some silt in the water.

The Forest Service estimates that visitors to the forest system lands are increasing by two to 3 percent per year, but the Jarbidge area has experienced a reduction in facilities available for use by the visiting public. Fewer campers mean fewer dollars spent in Jarbidge. In fact, Jack Creechley, owner of the Outdoor Inn, says that his business has fallen approximately 20 percent since the bull trout was listed. Another business has closed.

Clarke and Josaitis in the "Recreation Specialist's Report for Jarbidge Canyon Road Reconstruction Project" dated February 25th, 1997, state: "it has been reported by Jarbidge business own-

ers and observed in the field that visitor use in Jarbidge Canyon has dropped since the flood event. The overall decline in the number of people visiting the area is expected to continue under the current condition."

About 10 years ago—excuse me—for about 10 years the county has been trying to comply with the Federal Clean Water Act by installing a filtration plant for the Jarbidge River water supply which has 100 connections. Because of a variety of bureaucratic complications, we are now looking at a $1 million chlorination plant for a population of 60. Unfortunately, the bull trout is square in the middle of this causing us to do additional scoping and analysis prior to gaining approval for this vital project. The loss of a cooperative relationship between Elko County and the Forest Service has done no good for either party and has had a ripple effect throughout the county.

A direct economic impact of this damaged relationship is the cost to both Elko County and the United States of the mediation and court sponsored settlement proceedings.

The total appraised value of private property in Jarbidge is 4,206,000. Prior to the listing it was virtually impossible to acquire property in Jarbidge. Today about 10 percent of the property is for sale, and there are essentially no buyers coming forward. One business has closed.

These may not seem like severe impacts, and our situation certainly pales in consideration to Klamath Basin, but this county, the fourth largest in the continental United States, with only about 50,000 residents, has about 72 percent of its area controlled by the Federal Government. Sales and property taxes are vital, and when anything adversely impacts our tax revenues, the entire county feels it.

Clearly, the impacts of actions taken by Federal agencies are felt throughout our county. The listing of the bull trout and its subsequent effects on recreation in the town of Jarbidge has been detrimental to our well being.

The bull trout is a survivor. It is a glacial relic, and there is no glacier for survival. It has lasted through floods, intensive grazing, logging, mining and sports fishing. It co-existed with South Canyon Road for most of a century.

Therefore, I conclude my prepared remarks with a request that you use every tool available to measure whether or not the bull trout is truly threatened by our road or is, as we believe, doing just as well as it is has for a very long time. Thank you for this opportunity to testify.

[The prepared statement of Mr. Roberts follows:]

Statement of Brad Roberts, Chairman, Elko County Board of Commissions

Mr. Chairman, and members of the panel, thank you for the opportunity to present testimony at this important hearing. I am Brad Roberts, Chairman of the Elko County Board of Commissioners. My testimony today will address the Social and Economic impacts of the listing of the Jarbidge River population of bull trout.

It is not possible today for me to provide you with the actual dollar impact this listing has had on the town of Jarbidge or our County. What I will share with you is a brief rundown of the adverse social and economic impacts we have seen, so that you might better understand how important this issue is to our County.

Jarbidge, Nevada, is one of the most remote towns in the lower 48 states, and could be considered as a mining ghost town. There are some 12 year-around resi-

dents of the town, and in summer this increases to 50 or 60. A large percentage of the summer residents are retired persons. The towns businesses comprise: a bed and breakfast, one bar/restaurant, a general store, and a gasoline station. Other amenities include a U.S. Post Office and Volunteer Fire Department. In addition, two outfitters conduct business in the Jarbidge Mountains.

The Jarbidge area is renowned for its Class 1 airshed, scenic beauty, and numerous outdoor recreation opportunities. These factors directly account for the bulk of Jarbidge commerce. Visitors enjoy a variety of leisure pursuits, including hunting, fishing, camping, hiking, backpacking, horseback riding, ATV and four wheel driving, birdwatching, and rockhounding. Key to the pleasurable experience of these visitors is access to the Forest System lands in the area. In turn, these visitors are key to Jarbidges economic well-being.

Repair of South Canyon Road has been stymied by the emergency listing of the bull trout as a threatened species under the Endangered Species Act of 1973. Because the road has not been repaired, fire crews cannot readily access fires in Jarbidge Canyon south of Pine Creek, effectively placing the first fire line about three miles south of Jarbidge. This is unacceptable, as it clearly places a priority on the bull trout at the expense of people, their property, and the Forest. As a commissioner of this county, I am charged with protecting the lives and property of the county's residents. The listing of this fish is preventing me and my fellow commissioners from carrying out our mandate.

A General Accounting Office report issued in April of 1999, identified the Jarbidge area as one with high potential of catastrophic fire. If a fire were to begin south of (or, up-canyon of) the town of Jarbidge, it would, at the very least, inhibit visitors from spending time in the area, due to diminished recreational opportunities and scenic values. In a worst case, the town of Jarbidge could be destroyed.

Two issues are central to preventing a catastrophic fire: first, access is necessary so that fire suppression can be implemented while a fire is in its earliest stages. Secondly, land managers need access in order to properly reduce the fuel loads so that fires will be of lower intensity.

In addition to the fire suppression issue, the listing of the bull trout has prevented the Nevada Division of Wildlife from stocking sportfish in Jarbidge River. As the fishing experience is diminished by the lack of stocking, fewer anglers will visit Jarbidge, which reduces the revenue of the towns businesses.

According to an Environmental Assessment prepared by the Forest Service in 1998, there are six fewer campsites available in the canyon than there were before the 1995 flood that damaged South Canyon Road. This may not sound like much, until you realize that there are only some 23 campsites remaining in one of the premier outdoor recreation locations in the state of Nevada. The lack of campsites undoubtedly has reduced the number of camping visitors, and dispersal of Forest visitors is hampered by the lack of suitable campsites, resulting in overuse of the remaining facilities. Some of which include toilets which cannot be serviced and certainly create a greater environmental concern than some silt in the water. Furthermore, according to the Forest Services 1998 EA, "Jarbidge Canyon is an important avenue for forest visitors to access the [Jarbidge] wilderness."

The Forest Service estimates that visitors to Forest System lands are increasing by 2 to 3 percent per year, but the Jarbidge area has experienced a reduction in facilities available for use by the visiting public. Fewer campers means fewer dollars spent in Jarbidge. In fact, Jack Creechley, owner of the Outdoor Inn, says that his business has fallen approximately 20 percent since the bull trout was listed. Another business, the Red Dog Saloon, has closed. Numbers of hunters have also declined, because the Nevada Division of Wildlife has reduced the numbers of deer tags issued, largely as a result of the drought we have been experiencing. While the reduction in hunters is not directly related to the listing of bull trout, it does become a part of the cumulative effects on the financial well-being of Jarbidge. Combined with decreasing numbers of fishermen, campers, and other recreationists, the impact is severe.

The "Economic Specialist's Report for Jarbidge Canyon Road Reconstruction Project," authored by Doug Clarke and Clare Josaitis of the Forest Service, dated February 25, 1997, states that road reconstruction would result in the greatest numbers of visitors to the Jarbidge area when compared with no road reconstruction. The report states, "The local economy would do best under this alternative." Clarke and Josaitis (1997a) note that "Many factors, both natural and human caused, have cumulatively affected the economy of the town of Jarbidge." Included in their list of factors are:

- Lack of opportunities for further development of the town because it is surrounded by National Forest system lands

- The remote location of the town and its distance from substantial population centers
- The popularity of designated wilderness and its proximity to the town

Clarke and Josaitis, in their "Recreation Specialists Report for Jarbidge Canyon Road Reconstruction Project," also dated February 25, 1997, note that, "Prior to the 1995 flood, the Jarbidge Canyon road ended at Snowslide Trailhead, which was the most popular portal to the Jarbidge Wilderness, among horseback riders, backpackers and dayhikers." They also state, "It has been reported by Jarbidge business owners and observed in the field that visitor use in Jarbidge Canyon has dropped since the flood event. The over all decline in the number of people visiting the area is expected to continue under the current condition." Regarding the probable consequences of repairing the road, the report indicates, "Restored vehicle access to four camp areas above Pine Creek, would: (1) reduce but not eliminate the competition for campsites, (2) limit the amount of pioneering of new sites, and (3) reduce the amount of unauthorized camping within the town of Jarbidge." Clarke and Josaitis (1997b) indicate that administration of the wilderness boundary would be most effective with the road repaired.

For about ten years the County has been trying to comply with the Federal Clean Water Act by installing a filtration plant for the Jarbidge water supply, which has 100 connections. Because of a variety of bureaucratic complications, we are now looking at a one million dollar chlorination plant for a population of 60. Unfortunately, the bull trout is square in the middle of this, causing us to do additional scoping and analysis prior to gaining approval for this vital project.

In addition to the potential for catastrophic fire, loss of recreation opportunities, and additional costs to the County and community of Jarbidge, another significant social impact of the listing of the Jarbidge River bull trout is the deterioration of the relationship between Elko County and its residents with the Forest Service. Prior to the listing, the Forest Service and Elko County had worked cooperatively, both on maintenance of South Canyon Road, and on repair of the road after the 1995 flood. With three years passing and nothing done to restore the road, Elko County had grown weary of what the Chief of the Forest Service, Dale Bosworth, terms "analysis paralysis" exhibited by the Forest Service, and in July 1998 the County took steps to repair the road, citing the threat of catastrophic fire as the reason.

The bull trout had been considered for listing, but had been considered low on the Fish and Wildlife Services priority list. The Fish and Wildlife Service was sued by environmental groups, and as part of the settlement agreement reached in that lawsuit, published notice of intent to list various populations of bull trout under the ESA. This was done in June of 1998. In July of 1998, when Elko County authorized repair of South Canyon Road, citing the threat of catastrophic fire, the Jarbidge River population was emergency listed as endangered. The emergency listing alleged that Elko Countys road repair efforts would put the fish in immediate danger. The County was ordered by the Corps of Engineers to cease and desist repair efforts one day after they began. Nevada Division of Environmental Protection issued its own cease and desist order, which was later found to be unsubstantiated.

Numerous previous studies conducted by the Forest Service had been favorable to road repair. With the emergency listing, everything changed. Without involving the County, the agency decided to close the road, which it did in November and December of 1998. Elko County Commissioners, and many Elko County residents, were understandably upset by this unilateral action. The cooperative association between the County and the Forest Service was badly damaged.

The loss of a cooperative relationship between Elko County and the Forest Service has done no good for either party, and has had a ripple effect throughout the County. A direct economic impact of this damaged relationship is the cost, to both Elko County and the United States, of the mediation and court-sponsored settlement proceedings. A number of Elko County residents will also tell you that Elko Countys economic diversification efforts have been hampered by Elko County taking a stand against what we Commissioners perceived as a federal agency overstepping its authority.

We realize that the Forest Service has nothing to do with the listing of the bull trout. We also realize that it is far better that the County and the Forest Service work together than to be at loggerheads. Elko County and the Forest Service have recently begun the lengthy process of restoring an air of cooperation, but it will not happen overnight.

The assessed valuation of private property and improvements in Jarbidge is some $1,472,380. Our assessments are based on 35% of appraised value, so the total appraised value of private property in Jarbidge is $4,206,800. Prior to the listing, it was virtually impossible to acquire property in Jarbidge. Today, about 10% of the

property is for sale, and there are essentially no buyers coming forward. One business has closed.

These may not seem like severe impacts, and our situation certainly pales in comparison to the Klamath Basin. But this county, the 4th largest in the continental United States, with only about 50,000 residents, has about 72% of its area controlled by the federal government. Sales and property taxes are vital, and when anything adversely impacts our tax revenues, the entire County feels it. Clearly, the impacts of actions taken by federal agencies are felt throughout our county. The listing of the bull trout, and its subsequent effects on recreation, the town of Jarbidge, and our relationship with the Forest Service, has been detrimental to our well-being.

The bull trout is a survivor. It is a glacial relic and there is no glacier for survival. It has lasted through floods, intensive grazing (nearly 400,000 sheep at the turn of the century), logging (stories tell of the stream being choked with sawdust for lumber for the mines), mining (which included the dumping of toxic chemicals into the stream), and sportsfishing. It coexisted with South Canyon Road for most of a century. Therefore, I conclude my prepared remarks with a request that you use every tool available to measure whether or not the bull trout is truly threatened by our road, or is, as we believe, doing just as well as it has for a very long time.

Thank you for the opportunity to testify. I will be happy to answer any questions you wish to ask.

References Cited

Clarke, D., and Josaitis, C., 1997(a), Economic Specialists Report for Jarbidge Canyon Road Reconstruction Project, USDA Forest Service, 8 pp.

Clarke, D., and Josaitis, C., 1997(b), Recreation Specialists Report for Jarbidge Canyon Road Reconstruction Project, USDA Forest Service, 12 pp.

General Accounting Office, 1999, Western National Forests A Cohesive Strategy is Needed to Address Catastrophic Wildfire Threats, report GAO/RCED–99–65, 60 pp.

USDA Forest Service, 1998, Jarbidge River Environmental Assessment for Access and Restoration Between Pine Creek Campground and the Jarbidge Wilderness, Humboldt Toiyabe National Forest, June, 1998, 52 pp. plus appendices.

Mr. GIBBONS. You did that in less than 5 minutes. Very good.

John Carpenter, welcome.

STATEMENT OF JOHN C. CARPENTER, ASSEMBLYMAN, NEVADA STATE ASSEMBLY

Mr. CARPENTER. Thank you, Jim.

I really appreciate you being here today, and I think it shows the great commitment that you have to this area to come and listen to what we have to say.

I don't know if it would be proper or not, but I would like to enter this into the record if I could. It come out of last night's Free Press. I think two very good editorials that might lend some credence to what we're talking about here today.

Mr. GIBBONS. Without objection it will be entered into the record.

[The information has been retained in the Committee's official files.]

Mr. CARPENTER. Thank you.

As I said before, thank you very much for holding this hearing. We're most appreciative of your efforts to reform the Endangered Species Act. I believe the hearing today will give more insight into this contentious and important subject and the need for reform.

It is well to start with a quote from the Federal Register when the bull trout was listed as threatened. "the Jarbidge River population segment, composed of a single subpopulation with few individuals, is threatened by habitat, degradation from past and ongoing land management activities such as road construction and

maintenance, mining and grazing, interaction with nonnative fishes, and incidental angler harvest. We based this final determination on the best available science and commercial information including current data and new information received during the comment period."

And I'd like to say I also attended their hearing at Jackpot when they were discussing this, and the story has not changed since that hearing.

My analysis of the situation at the time of the listing is that road construction and maintenance was minimal. There had been no mining or grazing in the area of South Canyon for many years. The same situation exists today. The only interaction the bull trout have with nonnative fish are when they swim by each other.

Angler harvest has never been a problem. Who would want to catch a bull trout? It's going to cost you 10,000 bucks. According to people who were unlucky enough to catch them years ago, they were not a gourmet meal and gave little or no resistance when caught.

Their assertion that the listing was based on the best scientific and commercial information available is poppycock. The truth is they ignored all scientific information, especially the scientific information provided by NDOW.

I believe that Congress has required that regulations be written in plain English. The final rule listing of bull trout as threatened is not written in plain English. It just as well be written in a foreign language. It is so complicated and disjointed.

Section 4 of the Act requires the Fish and Wildlife Service to make a determination to list solely on the best scientific and commercial data available. A reading of the listing indicates the listing was political and not scientific. The listing was for the self-gratification of the Fish and Wildlife Service, a payoff to the Greenies, and appeasement of a misinformed Federal judge.

The bull trout is a prehistoric fish that needs very cold water. The fish is a remnant of the glacial period that ended several thousand years ago. Their population will continue to decline naturally until they are eventually extinct. This extinction is a natural process and not caused by human threat.

The fish are a threat to themselves as they are very carnivorous and eat each other. Just as the Endangered Species Act would not have prevented the extinction of the dinosaur, the Endangered Species Act cannot save the bull trout. The Endangered Species Act and listing the bull trout as threatened only prevents humans from enjoying the South Canyon. It limits their camping and fishing experience as well as increasing the fire danger to the canyon. Young families, the elderly and handicapped are even more affected by the listing and the restrictions that are in place.

Fish and Wildlife Service is supposed to make a determination of the suitability of the listing based upon five factors as stipulated in the Act. I submit to you that their narrative describing the listing criteria is misleading, filled with untruths and in many cases down right lies. The fish is not threatened, the Fish and Wildlife Service has perpetuated fraud upon the citizens of Jarbidge and Elko County, and I think the evidence is overwhelming that the

fish must be delisted, and I think that we saw that in the presentation here. Thank you very much.

[The prepared statement of Mr. Carpenter follows:]

Statement of Hon. John C. Carpenter, Assemblymen, Nevada State Assembly

Gentlemen,

Thank you very much for holding this hearing. We are most appreciative of your efforts to reform the Endangered Species Act. I believe the hearing today will give more insight into this contentious and important subject and the need for reform.

It is well to start with a quote from the Federal Register when the bull trout was listed as threatened. "The Jarbidge River population segment, composed of a single subpopulation with few individuals, is threatened by habitat degradation from past and ongoing land management activities such as road construction and maintenance, mining, and grazing; interactions with non-native fishes; and incidental angler harvest. We based this final determination on the best available scientific and commercial information including current data and new information received during the comment period".

My analysis of the situation at the time of the listing is that road construction and maintenance was minimal. There had been no mining or grazing in the area of South Canyon for many years with the same situation existing today. The only interaction the bull trout have with non-native fish, are when they swim by each other. Angler harvest has never been a problem. Who would want to catch a bull trout? According to people who were unlucky enough to catch them years ago, they were not a gourmet meal and give little or no resistance when caught.

Their assertion that the listing was based on best scientific and commercial information available is poppycock. The truth is they ignored all scientific information especially the scientific information provided by N.D.O.W.

I believe Congress has required that regulations be written in plain English. The final rule listing the bull trout as threatened is not written in plain English. It just as well be written in a foreign language. It is so complicated and disjointed.

Section 4 of the Act requires the Fish and Wildlife Service to make a determination to list solely on the best scientific and commercial data available. A reading of the listing indicates the listing was political and not scientific. The listing was for the self-gratification of the Fish and Wildlife Service, a pay off to the Greenies and the appeasement of a misinformed Federal Judge.

The bull trout is a prehistoric fish that needs very cold water. The fish is a remnant of the glacial period that ended several thousands years ago. Their population will continue to decline naturally until they are eventually extinct. This extinction is a natural process and not caused by human threat.

The fish are a threat to themselves as they are very carnivorous and eat each other. Just as the Endangered Species Act would have not prevented the extinction of the dinosaur, the Endangered Species Act cannot save the bull trout. The Endangered Species Act and the listing of the bull trout as threatened, only prevents humans from enjoying the South Canyon. It limits their camping and fishing experience as well as increasing the fire danger to the Canyon. Young families, the elderly, and handicapped are even more affected by the listing and restrictions that are in place.

The Fish and Wildlife Service is supposed to make a determination of the suitability of the listing based up five factors as stipulated in the Act. I submit to you that the narrative describing the listing criteria is misleading, filled with untruths and in many cases downright lies. The fish is not threatened, the Fish and Wildlife Service has perpetuated fraud upon the citizens of Jarbidge and Elko County. The evidence is over-whelming; the fish must be de-listed.

Mr. GIBBONS. I'm truly impressed. Both of you did that in less than 5 minutes. Very good of you, and we will submit your full written testimony for the record.

Let me take a few moments here to ask a couple of questions of each of you, and I want to start with the concept that, John, you just mentioned the fire danger up there. I know that access in order to be able not only to improve the quality and the condition

of the forest is important up there, but access to get up there if there is ever a fire is important as well.

As you know, Congress has recently been allocating additional funding to state and Federal agencies for the purpose of getting on top of our wildfires. Can you state what impact the bull trout listing has had on your planning and your consideration for being able to fight a forest fire if one should occur up there?

Mr. CARPENTER. Thank you. I think that that's a very good point in that before we had a road there that was completely passable to most vehicles, even the largest trucks that the Forest Service and our NDEP has. But now about a mile and-a-half of that road you cannot get up there, and we know that when the lightning strike comes, that if you can get up there and put that fire out in a short period of time, the chances of it mushrooming into a real holocaust is very much limited. So we need that access.

And I'm going to talk about the road here, we need that access of the road to get up there to be able to put those fires out.

Now during the last few years citizens have went up there and repaired quite a stretch of that road. Even last Saturday, why, we went up there and we were able to fix one area where the new truck that the Forest Service had given to Nevada Division of Forestry was able to get up the canyon another few hundred more feet.

But it all helps if we can put those fires out early so that they don't mushroom into things that we have going on in California now. Because a fire would—it would not only destroy Jarbidge but we probably wouldn't have to worry about the bull trout any more because there wouldn't be any habitat left. So it's critical that we're able to fix that road for fire protection.

Mr. GIBBONS. Brad, have you in your experience as a County Commissioner had any consideration given to the effect of the cost of county operations due to listings like the bull trout?

Mr. ROBERTS. Well, we have been—like I said, there's been a reduction of business in the community. There were 29 campsites. There's 23 now because six are unusable. So it's reduced the ability for campers to find sites. It's made it more difficult for the Forest Service to manage in that they have what they call road campsites that are in undesirable areas.

It's not just the fire issue. People want to go up there and enjoy the experience of the wilderness, at least the wilderness trailhead. And you also have issues such as personal injury or so forth in those areas. And if you have an accident or an illness or something where people are unable to get there, they are going to have to virtually pack them out on a gurney for a mile or so before they can get to a vehicle. So it has its other impacts as well.

The road is virtually—I know we weren't to talk about the road, but they are intermixed between the listing of the fish and the road are actually one issue, I believe, because the fish wasn't listed for the benefit of the fish. It was listed for the benefit of the road not to be rebuilt.

And it's just made it very difficult for the recreationalist to use it and emergency personnel as well.

Mr. GIBBONS. Let me go back if I could, Brad, and talk about the new chlorination plant that you have got planned for Jarbidge up there. You said it was going to cost approximately $1 million.

Mr. ROBERTS. Correct.

Mr. GIBBONS. How are you going to distribute the cost with only, what did you say, 20 or so connections?

Mr. ROBERTS. There is 100 possible connections for the town of Jarbidge.

Mr. GIBBONS. 100. How do you distribute the cost of that plant and the operational cost to the 100 users?

Mr. ROBERTS. The water rights are going to go up dramatically for those users in that community. And the interesting part, because we have to depreciate out that value so that at some point in time that plant needs replaced or maintenance or so forth, that there will be monies available to do that in the future.

The initial work outside of the salaries and time expended by the county in getting to this plant or designing this plant and getting the monies and so forth, most of the money is grant money. But it's a one-time shot. If it needs maintenance, the town is going to have to pay for it.

And the bull trout listing has—we were ready to start work this summer. Now we're doing additional scoping because of the bull trout.

Mr. GIBBONS. So it's added to the cost of the county.

Mr. ROBERTS. Added to the cost. And the interesting part is it's a very, very, very rare occasion that we find any contaminants in the Jarbidge water system at all. But under Federal Clean Water Act, we have to make sure the tourists don't get in trouble.

Mr. GIBBONS. Do you have an estimate of what the individual water user will be charged, what will be the fee, the average fee that you can see down the road for this?

Mr. ROBERTS. Well, I know some of the residents are here, and they are sitting down so I'll tell them. I would not be out of line, I don't believe, if I said they were going to pay $150 a month for water.

Mr. GIBBONS. What does the average Elko County or city of Elko resident pay for water; do you know?

Mr. ROBERTS. You know, I don't know. Maybe John knows. He is a resident.

Mr. CARPENTER. I think that we pay for water service I think $17 a month.

Mr. GIBBONS. So if you live in the city you are paying $17 a month, if you live in Jarbidge you are going to pay 150, up to 150?

Mr. ROBERTS. Yes.

Mr. GIBBONS. If it works out that way.

Mr. ROBERTS. When that plant is on line and the additional plumbing that goes with it.

Mr. GIBBONS. To a lot of people up there, I'm sure that that is going to be an awfully difficult burden to bear, especially those that are on fixed incomes, been there for a while, senior citizens, et cetera.

Mr. CARPENTER. Jim, I would like to if I can comment a little bit on the fishery situation up there. It used to be that there was quite a few fishing licenses sold in the town of Jarbidge because the NDOW stocked the river, and especially the kids would really like to come up there, and that was their first fishing experience for many of them. And the trout that were planted there, why, they

were easily—some of them were easy to catch. But you know, if you're a first-time fisherman and you catch a fish, whether it is easy or not, you get hooked on it so you keep fishing.

But now we don't have that. The NDOW cannot stock that stream. To me, that's a major act of the endangered species that prevents NDOW from stocking that stream.

And so I really think that that is really doing a great disservice, not only to the people here in Elko County but many people come or used to come to Jarbidge for the fishing experience, and they just don't do it any more. So you know, it's kind of a snowball effect throughout the whole county when NDOW is prevented from doing that.

Mr. GIBBONS. I would imagine in addition to the fishing, the camping experience, access to the wilderness area, have all been impacted by the fact that the bull trout was listed up there as well. The economic part that you talked about earlier, businesses that are suffering up there because of this, John and Brad.

Mr. CARPENTER. You know that Caesar Salicchi, our County Recorder—or our County Treasurer—he reiterated to me many times, and Caesar is disabled from polio years ago, but going up the South Canyon was one of the enjoyments that he looked forward to every summer, and now he's prevented from doing that.

And if you go up that canyon, really up to the first campground there, it's just kind of a—the scenery remains the same. But if you can get up there another mile or half a mile, it opens up an entirely new vista that I think that elderly and handicapped and young families ought to be able to enjoy, which at the present time they cannot. So I think that's another real detriment to what has happened in the use of that canyon.

Mr. GIBBONS. Well, I don't have any more questions for each of you. If there is something that you want to add, a final comment you'd like to make, I'll give you that opportunity now if you want to do so.

Mr. CARPENTER. Well, I just—Congressman, I think that there is no reason to have the fish listed. The fish is going to do great on the habitat that's there. I think that if there would be something that we could really do, and I think you will hear testimony today that NDOW hasn't come up with a plan because they don't know what else they can do other than what they are doing now rather than close that whole canyon. And I just don't think that that's an option, you know, because the fish is up there in the wilderness area, and that's where it's doing as well as it can, and certainly there's no impact up there in the wilderness, and I just think that whatever you can do to delist the bull trout, we will be eternally grateful because it is something that is done that should not be there.

And you know, we have the Lahontan cutthroat trout in this county, and we're doing a lot of things to hope it will be delisted some day. But you know, we're fencing streams and modifying grazing and doing all those kind of things to get the Lahontan delisted. But there's really nothing we can do for the bull trout because he's just there and he's doing his thing, and we can't close that canyon down. That is not going to happen. So we need to get the trout delisted.

Mr. GIBBONS. Brad?

Mr. ROBERTS. I would have to agree with John. I think the editorial in last night's paper, the guest editorial from a native resident from Jarbidge really hit all the key points. And you know, the fish has been a survivor. If we truly are facing global warming, he ain't going to make it because he has to have glacial cold water to survive, and all the trees in the world are not going to make that cold enough for him.

As being a survivor, at the turn of the century, there's as many as 400,000 head of sheep running in that country. There is none now. The streams, there is some records telling of the Jarbidge River being clogged with sawdust from the sawmills up there, cutting the timber for the mines, and there's none of that now. And there are stories of the miners dumping chemicals in the river of toxic levels. There is none of that now.

And the fish is still there. But his worst demise is himself. There are other fish in the stream, he breeds with them, and those offspring are, and you may hear this from NDOW, but they are infertile and they eat their young. So how are you going to help a fish that there ain't any kind of critter that does that?

So anything you can do to bring this fish off the list would certainly help the overall economy and the recreational opportunities for all residents and tourists alike in the Jarbidge area.

Mr. GIBBONS. Well, I want to thank both of you specifically because when I came here, I made my first, very first opening statement the farther you get from Washington, D.C., the more common sense you can have in a discussion, and both of you have proved that point exactly. You came here with good common sense remarks, not a lot of emotion, based on facts, presented us with information that we need to hear and we need to have on our record that will help us move forward with this hearing that will help us move forward with the legislation as well. I wanted to thank each of you for being here today, and with that I'll excuse you and call up our second panel.

Our second panel is going to be Mr. Robert Williams, Field Supervisor for the Nevada State Office of the U.S. Fish and Wildlife Service under the Department of Interior, and Mr. Robert Vaught, Forest Supervisor, Humboldt-Toiyabe National Forest, U.S. Forest Service, Department of Agriculture. I have to be careful because if I say Bob, I have to know which Bob I'm talking to.

Mr. WILLIAMS. Just look at us and we'll know which one.

Mr. GIBBONS. I'll put Mr. instead of Bob.

I'd like to welcome both of you to this hearing. Both of you have been in this room on this issue before at a hearing, and appreciate your presence again today.

I will begin with Mr. Williams, U.S. Fish and Wildlife Service. If you can, summarize your testimony. We're happy to put your full and complete written testimony into the record. We will begin with you. Welcome, Mr. Williams. The floor is yours.

STATEMENT OF ROBERT WILLIAMS, FIELD SUPERVISOR, U.S. FISH AND WILDLIFE SERVICE

Mr. WILLIAMS. Mr. Chairman, thank you for the opportunity to meet again and to discuss the listing of the Jarbidge River popu-

lation bull trout. As you know, my name is Bob Williams. I am the Field Supervisor for the Fish and Wildlife Service here in the State of Nevada.

You have requested that the Service address three questions specifically: Was the listing of the Jarbidge bull trout population based solely on the best available science and commercial data? how does the bull trout listing meet the Endangered Species Act criteria? and what information would we need to delist the species?

I have submitted my testimony for the record.

For the past several months there's been much discussion about the use of good science in the Service decisionmaking. Given the impact that our resource management decisions can have on communities and individuals, species conservation decisions must be based on the best available science and commercial data.

Our data and scientific information must meet the highest possible ethical and professional standards. This is something I have taken very seriously in my 26-year career with the Department of Interior and working for the Service.

Assistant Secretary Manson testified in March before this Committee addressing the issue of science as it relates to the Fish and Wildlife Service. I think his comments are worth restating here for the record.

He said that first there is no monopoly on good science. The Department must make or must take a broad net, or cast a broad net—excuse me—to take advantage of independent scientific expertise. We believe that this will ensure that our decisions are based on the best available science, not just on one group's interpretation of the science.

We must also acknowledge that science is not exact and that even experts will differ in their opinions. Where there are differing interpretations of the science behind our decisions, we must provide opportunity both by the Department scientists and stakeholders to air their differences and work through them.

The Service has been repeatedly accused of listing the bull trout as a way to stop the South Canyon Road. This is just not the case. And I think the chronology of events that you outlined earlier indicate that.

The bull trout listing actually began back in 1985. And as you know, and as you indicated, much of the history of the listing of the bull trout was as a result of court ordered decisions.

The Service believed back in the early 1990's based on the population survey data and information that we had at that time, both real data and empirical data on the species and the habitat, that the bull trout was warranted for listing but precluded from listing because of other higher priorities. In 1992, the Service received a petition to list the trout as endangered throughout its range.

From 1992 to 1997, and after numerous motions, the Service did list the five distinct populations of bull trout in 1997 and for the Jarbidge 1998. While the lawsuits may have pushed the listing, the decisions to list the species, in our opinion, was based on the best available science collected across the range of the species including the information that we had on the Jarbidge for this particular listing in the Jarbidge EPS.

As it relates to your second question, I would like to briefly go through the five listing factors, and some of the information that we presented. A more detailed again outline is in my testimony. As you indicated, the first factor as it relates to listing is the present threatened destruction, modification or curtailment of habitat or range. We believed based on the information that past livestock, mining and other factors affecting the functionality of the stream significantly was affecting the current population of bull trout. Road construction and maintenance practices further evidenced the degradation of the stream and the habitat.

The second factor is overutilization for commercial, recreation, scientific or educational purposes. There was an angling limit of up to 10 bull trout per day until the species was listed in 1998. We believe that was significantly affecting the species.

Even with the catch and release program now in place, and with angler difficulty in identifying species, bull trout are likely still being taken in the system. A recent bull trout protein incident was reported in Idaho in the watershed indicating the taking continues today.

The third factor is disease and predation, which as you indicated is not a factor, or at least we don't believe it's a factor.

The fourth factor is inadequate protection mechanisms, and again, we believe that the watershed is relatively remote, access is difficult for much of the year, and there's been damaging activities occurring that have gone unchecked, such as road construction and maintenance, river channelization, riparian vegetation removal, firewood collection, instream woody debris removal, and unsustainable grazing.

The last factor is basically human caused or other human caused related activities. And one of the things that we identified in the listing was the nonnative species.

In 1998, we published a proposed rule to list the bull trout, again, using all the available information that we had at that time.

We notified the public of the proposal through the media and sent out over 800 letters to individuals. We held public meetings for the rule for 4 months. We received 23 comments pertaining to the population. We solicited formal, scientific, peer review, a process within our listing policy. We had one peer reviewer who did come back and basically stated that listing was the conservative and appropriate decision.

The last question that you asked of us was related to delisting criteria. The specific delisting criteria we have not been able to identify or haven't identified yet, but we are early in the process. We have identified a bull trout recovery team for this particular area and that we are working with the Nevada Division of Wildlife, the Idaho Game and Fish, Duck Valley Paiute-Shoshone Tribes, BLM, the Forest Service and ourselves, and the bull trout team has met for the first time in December and is continuing to develop a plan.

We hope to have a plan sometime by this fall. December I think is the target date.

Delisting will occur when the Jarbidge River population meets the recovery criteria that will ensure the species and its habitat are protected and can sustain itself. Consistent population monitoring

using statistical sound techniques will be critical to determine the recovery criteria and when delisting can occur.

Mr. Chairman, I appreciate your time, and this concludes my testimony.

[The prepared statement of Mr. Williams follows:]

Statement of Robert D. Williams, Field Supervisor, Nevada Fish and Wildlife Office, U.S. Fish and Wildlife Service, Department of the Interior

Mr. Chairman, thank you for the opportunity to appear before you today to discuss the listing of the Jarbidge River population of bull trout. My name is Bob Williams, Field Supervisor for the U.S. Fish and Wildlife Service's (Service) Nevada Fish and Wildlife Office in Reno.

For the past several months, there has been much discussion about the use of good science in the Service's decision-making. Given the impact that our resource management decisions can have on communities and individuals, the species conservation decisions we make must be based on the best available science. Our data and scientific information must meet the highest possible ethical and professional standards. This is something I have taken very seriously throughout my 26 year career, and I know that FWS Director Steve Williams continues to improve the use of sound science within the Fish and Wildlife Service.

Craig Manson, Assistant Secretary for Fish and Wildlife and Parks, testified in March 2002 before this Committee about issues related to the use of good science by the Service as it carries out its responsibilities. His comments are worth reiterating here: there is no monopoly on good science. The Department must cast a broad net to take advantage of independent scientific expertise. We believe that this will ensure that our decisions are based on the best available science, not just one group's, or another's, interpretation of the science. We must also acknowledge that science is not exact, and that even expert opinions can differ. Where there are differing interpretations of the science behind our decisions, we must provide opportunities for both Department scientists and stakeholders to air those differences and, wherever possible, resolve them. It must be an open process.

In your invitation to appear today, you asked us to ponder several questions. Was the listing of the Jarbidge River bull trout population based solely on the best available scientific and commercial data? How does the Jarbidge bull trout listing meet (or not meet) Endangered Species Act listing criteria? And, what information would be needed to delist? I would like to provide the Service's response to those questions.

Bull trout listing: science

We believe that the addition of the Jarbidge River bull trout population to the Endangered Species list was based solely on the best available scientific and commercial data. Section 4(b) of the Endangered Species Act of 1973, as amended (ESA), requires that determinations of endangered and threatened species be based solely on the best scientific and commercial data available after conducting a review of the status of the species and after taking into account efforts by states or foreign countries to protect the species. The ESA also requires that consideration be given to listing species which have been identified as in danger of extinction, or likely to become so within the foreseeable future, by any state or foreign country's conservation agency.

In 1985, the Service first included bull trout in a public Notice of Review (50 Federal Register 37958) identifying possible candidates for future listings under the ESA. These candidate species were typically added to the Service's public notices based upon concerns expressed by biologists from State and Federal agencies, universities, and other knowledgeable individuals from all over the country, and data in local Service office files. The Service maintained bull trout on a list of potential candidate species until 1997.

During this time period, the Service was also petitioned to list the bull trout as endangered. The Service's findings in response to the petition initiated a long series of legal actions and court decisions. As a result of a court order, the Service proposed to list the Klamath and Columbia river populations of bull trout on June 13, 1997 (62 Federal Register 32268), and the Coastal–Puget Sound, Jarbidge River, and St. Mary–Belly River populations on June 10, 1998 (63 Federal Register 31693).

The amount of research, surveys, and reports on bull trout increased greatly during the 1990s, most likely due to all the bull trout-related legal actions and the increasing potential for a listing of the species. For example in 1990, the Nevada Division of Wildlife (NDOW) gathered historical agency survey data and proposed future species management activities in a draft bull trout management plan report (Fed-

eral Aid Project No. F–20–26, Job No. 207.4). The Service also funded NDOW to perform a survey in 1993 to gather additional data on the Jarbidge River bull trout population, which was documented in a 1994 NDOW report. In 1999, NDOW organized a new Jarbidge River bull trout survey.

Using data from the 1990 and 1994 NDOW reports and other scientific information available at the time, including the 1999 survey data, the Service determined that the Jarbidge River population was small, isolated, and vulnerable to extinction. We also identified numerous potential threats to the population including habitat degradation from past and ongoing activities including mining, road construction and maintenance, grazing, angling, competition with stocked fish, and unpredictable natural events such as the debris torrents that occurred in the 1995 flood in the Jarbidge River Canyon. Based on these data, the Service listed the species as threatened on April 8, 1999 (64 Federal Register 17111).

Bull trout listing: listing criteria and threats to the species

Section 4(a) of the ESA sets forth the five factors upon which endangered or threatened status is conferred. The five factors are: 1) the present or threatened destruction, modification, or curtailment of its habitat or range; 2) overutilization for commercial, recreational, scientific, or educational purposes; 3) disease and predation; 4) the inadequacy of existing regulatory mechanisms; and 5) other natural or manmade factors affecting its continued existence. Based on the best available information, the Service determined that the Jarbidge River bull trout listing was warranted given the current threats to its population.

I will now review the application of these factors to the Jarbidge River bull trout population, which were discussed in detail in the April 1999 Federal Register listing decision.

1) The present or threatened destruction, modification, or curtailment of its habitat or range.

Bull trout historically occurred throughout much of the Snake River Basin. In addition to more subtle habitat changes such as increasing stream temperatures and sedimentation, genetic connectivity among bull trout populations in the basin was gradually lost due to dam construction, water diversions for irrigation, and animal grazing. Water quality concerns were also associated with streamside mine tailings, piles, and mine shaft drainage. The remaining Jarbidge River population is now isolated and located over 150 river miles from other bull trout populations. Due to its current restricted distribution and low numbers of fish, the Jarbidge River population is susceptible to a variety of threats.

2) Overutilization for commercial, recreational, scientific, or educational purposes.

The Jarbidge River system has been heavily fished, dating back to the 1930s. Decades of non-native trout stocking by both Idaho and Nevada encouraged increased angling pressure in bull trout habitat. Idaho stopped stocking trout in 1990, and Nevada's last stocking was in 1998. A 1990 NDOW report specifically stated concerns for the bull trout population because of angling pressure and the removal of larger bull trout (6–12 inches) from the system, possibly before they were old enough to reproduce for the first time. Angler harvest was considered by NDOW to be a likely "primary factor in the low densities of bull trout in the East and West forks of the Jarbidge River."

Harvest is considered a threat to both resident and migratory forms of bull trout. Migratory fish are at greater risk because of their lower numbers, desirable larger size and higher visibility to anglers. Anglers are known to have difficulty identifying bull trout, so unintentional harvest of bull trout is likely still occurring despite angler education efforts. Nevada bull trout fishing regulations were changed in 1998, and it is now a catch and release program. Limits on other trout (native redbands and residual stocked rainbows) and mountain whitefish are now 5 and 10 fish, respectively, which still allows for substantial fishing pressure and potential repeated bull trout captures. To date, bull trout monitoring has not been conducted long enough to allow for detection of improvements in the population. Idaho established a two trout limit for the Jarbidge River watershed in 1992, and prohibited harvest of bull trout entirely in 1995.

3) Disease and predation.

Disease and predation have not been documented as factors affecting the survival of bull trout in the Jarbidge River watershed.

4) The inadequacy of existing regulatory mechanisms.

Existing regulatory mechanisms protecting streams, stream channels, riparian areas, and floodplains are either inadequate to protect bull trout habitat or are not

sufficiently enforced. Activities that damage habitat are frequently undetected because the Jarbidge River watershed is relatively remote and access is difficult for much of the year. Examples of such activities might include road construction and maintenance practices, river channelization, riparian vegetation removal, firewood collection, stream bank stabilization, instream large woody debris removal, and unsustainable grazing practices, among others.

5) Other natural or manmade factors affecting its continued existence.

Natural and manmade factors affecting the continued existence of bull trout include introductions of non-native species (catchable-size rainbow trout) that compete with and may prey upon bull trout, drought, and debris torrents (such as the 1995 event on the West Fork of the Jarbidge River).

These five listing factors were discussed at length in our proposed rule to list the bull trout as an endangered species. The Service requested input on these factors from the public, agencies, scientific community, industry, and other interested parties. We notified over 800 individuals about our proposed rule, including private citizens; State and Federal agencies; Federal, State, county and city elected officials; and local media. We also published announcements of the proposed rule in local newspapers, including the Elko Daily Free Press here in Nevada. The Service held four public hearings, including one in Jackpot, Nevada, during July 1998. The public comment period was open for 4 months. We received 52 public comments on the proposed rule, and of these, 23 pertained to the Jarbidge River population. The majority of the comments supported the listing, with seven comments opposing listing. In the Service's view, few comments provided meaningful new data to consider with respect to the threats discussed in the proposed listing decision.

During the public comment period, we also solicited formal scientific peer review of our proposed rule in accordance with our Interagency Cooperative Policy for Peer Review in Endangered Species Act Activities (July 1, 1994; 59 FR 34270). We solicited six individuals with expertise in bull trout biology and salmonid ecology whose affiliations included academia and Federal, State, and Canadian Provincial agencies to review the proposed rule within the public comment period. Only one of the six peer reviewers responded to our official request. That reviewer stated that listing was the "conservative and appropriate decision." Another recognized bull trout expert from academia (not an official peer reviewer) submitted public comments strongly supporting the Jarbidge River bull trout listing.

As part of the administrative record we provided the results of an independent peer review of Jarbidge River bull trout data and population status presented in the 1999 NDOW Report. The peer review was performed by two fisheries scientists selected by the Western Division of the American Fisheries Society (AFS). The AFS peer review (reviewers remained anonymous to ensure impartiality) substantially supported the decision to list the species. The conclusion of our official peer review of the listing decision and the AFS peer review of the NDOW report were consistent with our decision to move forward with the listing.

In July 1998, with the Jarbidge River bull trout already proposed for listing, Elko County began reconstructing the South Canyon Road in the midst of known bull trout habitat. Potential direct and indirect impacts in the West Fork of the Jarbidge River included the harm and harassment of juvenile and adult bull trout; disruption or prevention of bull trout migration and spawning; alteration of stream flow and temperature; loss of riparian vegetation; and increased sediment transport. This combination of activities had the potential to affect the future survival and recovery of the Jarbidge River population. For these reasons, the Service temporarily emergency listed the Jarbidge River population as endangered on August 11, 1998 (63 Federal Register 42757). The emergency listing lasted for 240 days.

On April 8, 1999, we published a final rule listing the Jarbidge River population as threatened, as we had originally proposed (64 Federal Register 17110). Listing the bull trout as threatened rather than endangered was possible due to habitat restoration in the South Canyon Road area and other beneficial projects that were implemented by Federal and State agencies, including habitat management improvements and the elimination of rainbow trout stocking in Nevada.

Along with conferring the threatened status on the bull trout, the final listing rule included a "special rule", under section 4(d) of the ESA. The rule allowed for incidental take of bull trout in the Jarbidge River population for educational, conservation or scientific purposes, as well as by recreational fishing for 2 years (until April 9, 2001). To extend the special rule beyond the original 2 years, the 4(d) rule required the States of Idaho and Nevada to develop a conservation and management plan for bull trout in the Jarbidge River. The extension would provide continued legal angling opportunities for the public in the Jarbidge River. The Service has been advised by NDOW that the management plan is close to completion.

Bull trout: delisting

At present, the requirements for delisting have not been identified. Several years ago a Bull Trout Recovery Team was assembled. Representatives from the States of Idaho, Montana, Nevada, Oregon and Washington, Upper Columbia River United Tribes, and Service offices in five states were asked to participate. This recovery oversight team has prepared a range-wide draft bull trout recovery plan which will be published for public review this fall (November 2002).

Recovery and delisting of each of the five listed bull trout populations can occur independent of each other. A Recovery Unit Team has been established to develop a recovery plan specifically for the Jarbidge River population and to identify specific delisting criteria. Similar to the larger recovery oversight team, this local recovery team includes representatives from the States (including NDOW and Idaho Department of Fish and Game); Tribes (Duck Valley Paiute–Shoshone Tribes' Habitat, Parks, Fish and Game Division); and Federal agencies (Bureau of Land Management, U.S. Forest Service , and the Service). The Team met for the first time in December 2001 and should have a draft recovery plan by the end of this year (December 2002).

This local team is tasked with defining bull trout recovery for the Jarbidge River including specific objectives and recovery criteria for delisting, reviewing factors affecting the species, identifying site-specific recovery actions, and estimating recovery costs. NDOW has participated in the development of the recovery plan and is one of many stakeholders. Participation by the States and other local stakeholders is vital in order for the recovery effort to be successful. The draft recovery plan will be available for public review, and we hope to receive substantial public input from stakeholders, including the residents of Jarbidge and the Elko County Board of Commissioners. All comments received will be considered by the local recovery team in finalizing the recovery plan. Our goal is to have the final recovery plan for the Jarbidge River, Coastal Puget Sound, and St. Mary–Belly River populations by 2004. We hope to finalize the range-wide plan by 2003.

Delisting will occur when the Jarbidge River population meets the recovery criteria that are developed by the local recovery unit team and identified in the recovery plan. These recovery criteria will address the following population characteristics within the recovery unit: 1) the distribution of bull trout in existing and potential local populations (local populations are groups of bull trout that spawn within a particular stream or portion of a stream system); 2) the estimated abundance of adult bull trout, expressed as either a point estimate or range of individuals; 3) the presence of stable or increasing trends for adult bull trout abundance; and 4) the restoration of fish passage at any barriers identified as inhibiting recovery. Consistent population monitoring using statistically sound techniques will be required to determine when the recovery criteria have been met and delisting can occur.

Since the 1999 listing, the Service has participated in conducting additional surveys of bull trout and bull trout habitat in the Jarbidge River system with NDOW, IDFG, BLM, and the USFS. This work has occurred throughout the watershed on the East and West forks of the Jarbidge River, Dave Creek, Deer Creek, Jack Creek, Pine Creek, and Slide Creek. Probably the most significant findings from this work is the documentation of bull trout spawning in Dave Creek in an area with substantial habitat restoration potential, and the capture of five potential migratory bull trout in fish traps on the lower East and West forks by IDFG. Both of these events are extremely encouraging for the future success of the species recovery efforts in the watershed.

Mr. Chairman, this concludes my testimony. I will be happy to answer any questions that you or other members of the Subcommittee may have. Again, I thank you for giving the Fish and Wildlife Service the opportunity to testify.

Mr. GIBBONS. Thank you very much, Mr. Williams.

Mr. Vaught, welcome to the Committee. Happy to have you.

STATEMENT OF ROBERT L. VAUGHT, FOREST SUPERVISOR, HUMBOLDT-TOIYABE NATIONAL FOREST

Mr. VAUGHT. Thank you very much. I appreciate being here, Congressman Gibbons.

I would like to talk in more or less general about the Forest Service management issues within the Jarbidge drainage. That is

located on the Jarbidge Ranger District on the Humboldt-Toiyabe National Forest.

My name is Bob Vaught. I'm the Forest Supervisor for the Humboldt-Toiyabe National Forest. And I appreciate your interest and your willingness to address this topic.

I think that it is one of the more contentious issues because of the strong disagreements associated with the entire Jarbidge road issue, and that dealing with it effectively is important in order to ultimately effectively deal with the road issue. So this is important, and I appreciate your interest in allowing us to be here today.

I defer to the Fish and Wildlife Service considering listing issues specifically. The Forest Service role and responsibility is to manage habitat and resources that are located on the National Forest. We also have a very specific role to work with the community and the people in dealing with those resource issues so that both the community, people and resources are all effectively and appropriately dealt with in terms of our decisionmaking.

There are a number of efforts that have been underway for many decades, including recently, that the Forest Service has been involved with in the Jarbidge drainage. I would like to briefly mention those because I do think it is important to the discussion. Some have already been mentioned. Some are difficult issues such as the water effort that is underway to develop a water system for the community that meets state and Federal requirements.

The sanitary landfill issue which within the recent past has been worked on very diligently by those that were involved in that. We have been involved in working on grazing issues up there. We have been involved in working on reclamation of mining issues up there. The Forest Service has been very involved in road work, bridge work, culvert work, bridge and culvert replacement, bridge and culvert maintenance which have been essential for the community.

So we have a long history of working with the community to try to resolve these issues.

Personally as a professional of nearly 25 years in the Forest Service, it is of great consternation to me when these kinds of things occur in terms of the controversy associated with this issue, that essentially stop good decisionmaking from going on and from getting to resolution. And I am hopeful that we will soon be able to do that.

We're all familiar with the intense controversy associated with this. As you also well know, in April of 2001, there was a settlement agreement that was signed which outlines the factors which allow the parties that have been involved in this to work together in a positive way toward resolution and ultimate decision about whether and how and where the road can be rebuilt.

One of the things that that settlement agreement does is it provides Elko County the opportunity to submit to the Forest Service a plan that they support for road development. The Forest Service has now received that proposal, and in March of this year we submitted and issued a notice of intent to do an environmental impact statement to work on resolution of this issue.

An environmental impact statement will finally be issued we hope about a year from now, hopefully just a little bit sooner than that, and according to the laws under which we operate, we will

of course consult with the U.S. Fish and Wildlife Service in that decision.

In conclusion, the Forest Service remains committed to working with the county, to working with the people of Jarbidge, to working with the signatories of the settlement agreement, to seek resolution to this issue. I certainly support the efforts that we nationally are working on to try to make the environmental—the ESA, the Endangered Species Act, a document that works for people and works for the West. Until there are changes to that, we will do everything we can to move forward with the decision in consultation with the county that is going to be one that is a wise decision and is good for the people and is good for the resources.

Thank you very much for the opportunity to be here, and as always, would be very open to any questions that you have.

[The prepared statement of Mr. Vaught follows:]

Statement of Robert L. Vaught, Forest Supervisor, Humboldt–Toiyabe National Forest, USDA Forest Service

Thank you for the opportunity to be with you today to discuss the management of the Jarbidge watershed in the Jarbidge Ranger District of the Humboldt–Toiyabe National Forest. My name is Bob Vaught. I am the Forest Supervisor for the Humboldt–Toiyabe National Forest.

I will defer to the Fish and Wildlife Service to address your questions concerning the listing of the bull trout. Today, I will focus my comments on the management of National Forest System lands in the Jarbidge watershed, home to the southern most population of bull trout. I will also comment on the Forest Service's efforts to work with Elko County and local individuals concerned about the management of the National Forest.

Prior to the 1999 listing of the bull trout as a threatened species under the Endangered Species Act, the Forest Service had undertaken several management actions aimed at improving the aquatic habitat in the Jarbidge River watershed. These actions included:

1. Implementation of vegetative utilization standards on all nine grazing allotments within Jarbidge River sub-watersheds;
2. Replacement of a culvert with a bridge to restore fish passage between the West Fork of the Jarbidge River and Jack Creek;
3. Fencing of several upland springs and portions of river and creek bottoms to protect riparian areas from the impacts of cattle;
4. Implementation of reclamation and erosion control measures for ceased mining operations; and
5. Collaboration with Elko County to close the Jarbidge municipal landfill and issuance to the County of a special use permit for a transfer station that comports with regulatory requirements of the Nevada Division of Environmental Protection.

In 1995, a high water event in the Jarbidge River canyon washed out portions of the South Canyon Road and caused the river to cut a new channel where the road once ran. This event stimulated much discussion concerning the future of the road, access to portions of the National Forest and the general health of the aquatic ecosystem.

In 1997, the Regional Forester reviewed on appeal a decision to rebuild the road and remanded the decision to the Humboldt–Toiyabe National Forest for further analysis on the effects to the bull trout and other aquatic species from road construction and from possible future road failure. The Fish and Wildlife Service in April 1999 listed the bull trout as a threatened species. The listing requires the Forest Service to consult with the Fish and Wildlife Service on agency action, such as construction or reconstruction.

In November 1999, when the House Committee on Resources Subcommittee on Forests and Forest Health conducted a field hearing in Elko, the United States and Elko County were engaged in discussions concerning the fate of a washed-out portion of the South Canyon Road along the West Fork of the Jarbidge River. Today, following a federal district court settlement agreement signed in April, 2001, I am please to inform you Mr. Chairman that the Forest Service and Elko County are diligently working together to implement the provisions of this agreement.

The Settlement Agreement spells out the working relationship between the parties to the Agreement: John Carpenter, Elko County, the State of Nevada's Division of Environmental Protection, and the agencies of the United States, the Fish and Wildlife Service, the Environmental Protection Agency, and USDA Forest Service. The Agreement provides Elko County with the opportunity to submit a proposal to the Forest Service to reestablish the South Canyon Road and requires the completion of certain watershed improvement projects. The Agreement further provides that the Forest Service study the road reconstruction and watershed projects following established agency procedures for environmental analysis.

Let me give you an example of how committed Elko County and the Forest Service are to working together. A portion of the Settlement Agreement identifies the need for interim work on the South Canyon Road to prevent erosion. Last Saturday, citizen volunteers, Elko County Commissioners and staff, and Forest Service workers, nearly 20 people in all, worked side-by-side on a short-term measure to armor stream banks in an effort that will reduce the amount of sediment reaching the West Fork of the Jarbidge River.

During the fall of 2001, contract biologists, hydrologists and soil scientist, collected data on the condition of the Jarbidge watershed. These inventories represent the most recent and complete data available to the Forest Service and will be used during the environmental analysis. In March 2002, the Forest Service issued a Notice of Intent to evaluate the effects of several alternatives for road reconstruction, and watershed and aquatic habitat improvement projects. A series of public meetings were held this spring and work has begun on a draft Environmental Impact Statement. Elko County as a cooperating agency is working closely with the Forest Service in the environmental analysis process. They submitted a proposal for road reconstruction to the Forest Service this past June. A Final Environmental Impact Statement expected next spring.

As required by law (the National Environmental Policy Act, the National Forest Management Act, and the Endangered Species Act, and others) and regulations, the Forest Service will consult with the Fish and Wildlife Service to guarantee that any action in the South Jarbidge Canyon will not jeopardize the continued existence of the listed bull trout. The Forest Service asked the Fish and Wildlife Service to be a cooperating agency during the environmental analysis process. The Service agreed. Working closely in this manner will ensure the Service fully understands the project and potential impacts to the listed species, and allow them to provide input to the alternatives to be evaluated.

In conclusion, the Forest Service remains committed to working with the cooperating agencies and keeping the interested publics informed of the progress we are making on the environmental analysis and we are also committed to following the laws and regulations governing the environmental analysis.

Mr. Chairman, this concludes my statement. I will be happy to answer any questions you may have.

Mr. GIBBONS. Thank you. Thank you, Mr. Vaught.

Both of you provided I think all of us an important statement, function of your agency and the purpose why you have taken on this issue, and I think it's important for everyone here to hear that as well.

Of course, my questions will be focused I believe primarily to Mr. Williams. Should I say Dr. Williams? You do have a Ph.D.?

Mr. WILLIAMS. No, I do not.

Mr. GIBBONS. You do not. Are you a biologist?

Mr. WILLIAMS. Yes, I have a Master's Degree in fishery biology.

Mr. GIBBONS. So when we talk about fish, you know a lot about them.

Mr. WILLIAMS. I used to know more about them. Being a manager. The science has continued.

Mr. GIBBONS. Let me go back, because the issue gets back to the whole purpose why we're here what the criteria was that we were looking at, you were looking at when you decided to list this as a threatened species, and as I listened to your statement, you kept using the term we believe. What data were you using at that point?

Mr. WILLIAMS. I think for the—and we tried to in my written testimony outline a lot more of the detail. If I can—and I have not specifically tracked all the data that was used in the listing decisions that were made in '94—.

Mr. GIBBONS. Let me ask the question, did the Forest Service itself, U.S.—I mean not the Forest Service—Fish and Wildlife Service itself collect the data? Did it study it with its own biologist?

Mr. WILLIAMS. No, and that is where I was going to go. It is my understanding in the '94 era, 1994, is when the Fish and Wildlife Service was looking at the species specifically rangewide and trying to make a determination of whether it was warranted, based on the first petitions, and that is when we basically said from all the information we collected, and most of it came from academia, it came from states, tribes, whoever basically was on the ground and managing the species, those were the data that we used and looked at the species rangewide, made the determination that it wasn't warranted for listing rangewide. But within the terminus of the United States or the lower 48, we said that it was warranted based on the information from the states, from the tribal entities across the range in the lower 48, that it was warranted because of the status of the species and because of the habitat, modifications or changes or destruction, things that had gone on across the range.

Mr. GIBBONS. Let me summarize because the law I think is very clear. It says decisions to list a species must be made, quote, solely on the basis of best scientific and commercially available data. And in 1999, you made that decision to list the bull trout in Jarbidge based on the best scientific and commercially available data; is that correct?

Mr. WILLIAMS. That is correct. And that data did include the data from the Division of Wildlife. From their 1990 report, their 1994 report, and even their raw data or their preliminary data that we had and were able to talk to them about that wasn't published until after the final rule came out in 1999. So we were in communication with them.

Mr. GIBBONS. OK. In 1994, though, your agency published a finding that a listing of the bull trout was warranted but precluded by higher priority listings.

Mr. WILLIAMS. That is correct.

Mr. GIBBONS. Was your proposed rule to list the Columbian Klamath population, I presume the bull trout, in 1997 a response to the '96 Oregon District Court order, or was it based on the basis of best scientific and commercial data?

Mr. WILLIAMS. I think—well, on the best available information, the best available scientific information at the time. But I think where the Court came in and said your decision to put it at a priority 9 is not appropriate given what the plaintiffs had come to us with with maybe new information or other information saying, we want this species listed now. And so the Court directed us to reconsider the information and any new information, and that's where we basically made and agreed to go forward with the Columbia and Klamath.

Mr. GIBBONS. That was '97.

Mr. WILLIAMS. Yes.

Mr. GIBBONS. The Jarbidge population was not proposed to be listed until June of '98, after the Oregon District Court order of December of '97 ordered your agency to reconsider the proposed rule we just talked about, and you said the reason the Jarbidge bull trout was not proposed to be listed in your '97 rule was that the Court order prohibited using data not part of the '94 record; is that correct?

Mr. WILLIAMS. Right. But in March of '97, we were redirected to look at all of the—look at the '94 record and any new information. That's what the March '97 directive from the Court was.

Mr. GIBBONS. So the information, though, on the Jarbidge trout was not available to you prior to '94, was it?

Mr. WILLIAMS. Yes, it was. We had Jarbidge information in '90 and the '94 report.

Mr. GIBBONS. Well, I'm reading the Court record, and it indicated it was not part of the '94 record. Did you get information after '94 that tipped the scales then in listing this species?

Mr. WILLIAMS. From March of '97 until we came out with the proposed rule is when we were allowed to look at all the available information and do an analysis of threats, and that's—and we basically were directed—based on that information, we made another finding that it was warranted for us to list Jarbidge, Puget Sound and St. Mary Belly.

Mr. GIBBONS. But as you heard the two gentlemen earlier, there have been no grazing, overgrazing in there for decades. Road construction had been going on for a number of years, but there was no data on what the effect of the road construction had been. Overutilization, whether by recreation, et cetera, you didn't have data that specified that.

You came in and you used hypothetical or opinions because that's what you said, you said we believe rather than we studied the data on it. So you took data that wasn't scientific or commercial and posed that with opinion data, did you not?

Mr. WILLIAMS. Yes. But if I could add. I think—.

Mr. GIBBONS. I'm not trying to drag you through this kicking and screaming. It's OK to say yes.

Mr. WILLIAMS. But I think it's important for the record for you to understand the process that we went through, if you will, in terms of the analyses. And while we may not have had the exact amount of sediment, the tonnage of sediment that goes in from the sidecasting of the road maintenance activity, we know from other streams and other areas that that is a problem in terms of sedimentation on spawning areas. That is known within the scientific community of people studying trout. So that in and of itself becomes a threat.

While we don't have again the specific amount that goes in on the Jarbidge and any particular bend in the river, we know that road maintenance activities is affecting, can affect reproduction, can affect the species. So that becomes a threat.

The fact that it is an ongoing activity, that becomes a threat in terms of our analysis and the way we present it.

Mr. GIBBONS. And if you knew about any typical road construction that proposed the threat to the species, you would take action to stop it after the listing as a threatened species; correct?

Mr. WILLIAMS. Correct. I think that that's really the impetus of why we moved it in terms of the emergency listing.

Mr. GIBBONS. Let me ask this question. Did your agency participate with the Forest Service in the removal of the road? In other words, the reshaping and contouring of the original existing road structure after the listing of threatened?

Mr. WILLIAMS. Yes.

Mr. GIBBONS. And you recognized then the activities that took place by that construction crew during that time and its effect on the bull trout?

Mr. WILLIAMS. Yes.

Mr. GIBBONS. Because we have seen a lot of pictures where that construction crew had its equipment in the middle of the stream. It was using heavy equipment, diversions, had bales of hay and plastic diverting the canal and the streambed. But that's OK.

Mr. WILLIAMS. We went through what we called section 7 consultation. We worked with the Forest Service and experts in terms of stream and river morphology to make sure that the activities that were undertaken minimized effects to the species, minimized effects to the stream, while trying to reconfigure and put the stream back into a healthy state. So under that kind of a scenario, yes, we did basically concur that those practices and that activity was consistent with conservation of the species.

Mr. GIBBONS. I guess it's all a relative portion. When you have a bulldozer sitting in the middle of a stream, whether or not that's healthy for a fish species is a question we can debate, and we won't get into that now.

Let me ask, go on to this. How many of the U.S. Fish and Wildlife Service listings, 1200 we have cited in here, have had the luxury of going through a rigorous scientific and commercially available data analysis prior to listing?

Mr. WILLIAMS. I think all of them to the same extent that we went through for the listing of the bull trout. Many species are afforded a more thorough analysis, if you will, if there is more available information, we know more about the species, we know more about the direct threats. There are a host of species out there that we have listed with not a lot of information. But again, using the process of a surrogate species or closely related species where we know where certain things can be affecting the overall dynamics of population structure.

In terms of the analysis, we do have a Fish and Wildlife handbook. We have classes basically where we send young biologists to basically teach them and walk them through the mental processes with using all the available information that they can to put together a sound listing package.

Mr. GIBBONS. I think you saw the recommendations and the studies that have been done by other scientists who were specialists in fisheries and extinction specialists, and the recommendations that they made with regard to what they saw from all of the data. And I guess the one big conclusion that we can all draw from looking at what their statements and their reviews have been, is that the data is inconclusive, the data leads one way or the other but doesn't specifically come to a finite conclusion.

Mr. WILLIAMS. For this species, if I could be so bold, I think for this species we don't argue the point that it is at the southern most end of its range, and there is global warming. We recognize that going on. But I don't believe that there is anything in the Endangered Species Act that says you can walk away from it. Because of all of the things that you can't control, you just walk away from it.

Mr. GIBBONS. We're not asking you to walk away. I think what we want to do is make sure that the law is applied, it has to use solely decisions made on the best scientific and commercially available data, and that when there is a listing, that we start taking action to turn it around to get it back from the edge of extinction if we can, and if we can't, rationally do what we can. The purpose of the bill and the purpose of the law was not to be using the ESA, the Endangered Species Act, to effect some other agenda, and that's what we see on some occasions.

Now, I'll give you one example where the Fish and Wildlife Service is turning another eye away from doing its job, and that's on the Potomac River, there is a new bridge being built between Virginia and Maryland just south of the Capitol to facilitate the heavy, heavy traffic burden there. There is endangered Atlantic sturgeon that lives in the Potomac River there. Dredging the silt off the bottom is indeed an enormous impact, has an enormous impact on the species, that endangered species itself. And yet, the Fish and Wildlife Service has sort of stepped back and said it's OK to dredge because we need the bridge.

Now I guarantee you out here in Nevada, you would never get even the consideration of that kind of a plan, let alone dredging in the river, moving the bed upon which the sturgeon lays its eggs and survives on out here. Plus it's stirring up a lot of sediment, a lot of toxics metals. They are continuing to allow the Department of Reclamation to dump toxic materials into the Potomac, and yet it has the habitat for an endangered species.

And we see a different application of the standards east of the Mississippi than we do out here in the West. And for those of us out West, these people out here that are affected dramatically, it is very difficult to understand why when you are in Virginia and Maryland you can go ahead and build an eight lane bridge across an endangered species habitat, but we can't have a little dirt road along the side of the stream up there that doesn't impact the bull trout.

[Applause.]

Mr. GIBBONS. But the purpose. If you are going to do it in one place, be consistent and do it every place. And the frustration is what has led not only us in Nevada but other states, California, the Klamath area, and Oregon in the Klamath area—excuse me—Idaho, Montana, Utah, Arizona, many many western states are having the same very very difficult time with the Endangered Species Act because when they get listed, there is no way to get them off the listing. And that's something we want to talk about in a minute is how we're going to get this species off the endangered list.

The impact it has on private property is enormous. When a butterfly is listed, as it was recently up in Northwest Nevada, the im-

pact that had on private property owners and the ability that they could have on their own property is dramatically impacted. I don't think that was the intent of the law because I can't imagine back in 1973 that Congress would envision that somebody could not step foot on his own property for fear of endangering the habitat of a butterfly.

It's gone so far over the edge today that many of these people here are becoming so frustrated, they don't know where to turn. And this is why we have to come back in Congress and start saying we have to start using scientific data rather than using subjective nonanalytical approaches.

And I can just say that it appeared when you listed this you didn't model the bull trout population risk or the uncertainty using the available methods, or even the quoted estimates provided by answers in your proposed rule that were brought up. There were some modeling that should have been done on those proposed rules. And the Nevada Department of Wildlife reports that were given to you about the scarcity of the empirical data.

And it seems to me that the modeling data that's necessary, the science modeling—I mean, I'm a scientist but I'm in the mining and geology side of it. We always use modeling when we're looking at how do we view something in total and how do we analyze it from the perspective of making use of it.

Modeling is something that you as a scientist know is the proper way to do it, but it doesn't seem to me that you modeled the bull trout using all of that data that you say you had from schools, universities, states, private industries, people, tribes. You must have had enough data to model all of this to give you a pretty good idea, but it doesn't seem that you used the modeling as a purpose.

Let me ask: Why didn't you model these? Why didn't you perform a modeling exercise?

Mr. WILLIAMS. In terms of modeling the population, I think in our review of the information that we had and because of the way it was collected, I guess we felt like because you know any model is only as good as the information going in and the variances in terms of if you run a statistical analysis of the variances that you are going to get out at the end. And because we just believed that the data had limitations in terms of being able to extrapolate or start looking at the overall population.

And I think that was borne out through some of the peer review in terms of the utility of the information. But we took it at face value. And those data are valuable from the standpoint of looking at snapshots in time over so many years, the late '80's on through early '90's and into the late '90's in terms of the persistence of the species. But the scientists have also said the persistence of this species, bull trout in the Jarbidge, is not very viable, if you will, based on where we are right now.

I think the good news is, though, based on the data collection and the working together with the state that's occurring today, we're getting more information. We're looking at finding other areas that have temperature that can expand their range. With some habitat improvements, I believe that this species can extend itself in terms of distribution, and we can get into some activities

working with the Forest Service and the community to basically have and define what we believe to be delisting criteria.

Mr. GIBBONS. Let's talk for a moment in the brief time that we have, let's talk a little bit about the delisting process. In order to delist this trout what would be the requirements to delist the bull trout?

Mr. WILLIAMS. I guess the way—and there is a—let me back up a little bit. There is a rangewide bull trout recovery team, and that's across the range.

Mr. GIBBONS. So you're saying you would have to have the bull trout recovery team in Oregon, Idaho, Montana and Nevada to delist the bull trout in Jarbidge?

Mr. WILLIAMS. No. I just wanted to let you know where the recovery criteria process is. There is a rangewide team of which the state has been invited and the Fish and Wildlife Service is basically leading that rangewide team. Each of the distinct population segments, which the Jarbidge is distinct and of itself, has what we call a local unit team. And so we will have specific criteria for the Jarbidge distinct population segment upon which once we meet those criteria this area can go ahead and be delisted, without the Columbia, without the Klamath or Puget Sound or St. Mary.

The recovery criteria that we believe that will need to be addressed within each of their units, and I can kind of list them for you, is looking at the distribution of bull trout in the existing and potential local populations or in these local population areas; the established abundance of adult bull trout expressed as either a point estimate or a range of individuals; the presence of stable or increasing trends in the bull trout abundance; and restoration of fish passage at any barriers identified within a recovery area.

Mr. GIBBONS. This plan is the one you are talking about that will be finished by December?

Mr. WILLIAMS. It should start addressing those things and at least laying it out by the team, and then that would go out for public comment, right. We hope to have those kinds of criteria and how we want to approach each of those four.

Mr. GIBBONS. And the kinds of criteria would be like the American Society of Fisheries have said, if you have a population of less than 2000, it's risky, if you have more than 2000. So if I walked out there today or say I walked out there January 2003, you come up with your plan that says if we have a population of 2000, not the 694 bull trout that they estimate, and I went out there and I individually counted 2,010 bull trout in the stream, and I qualified under that, would it be delisted if I came in with a very specific study, if I were a biologist and you believed me, and studied and said that 2,010 bull trout, a population that is capable of sustaining itself and it was over the 2,000 mark, would you delist it?

Mr. WILLIAMS. I think that that's one of several of the criteria. The exact number as estimated by adult abundance, that is what you are talking about. You got 2,000 adults you counted, that's one criteria.

But I think in terms of delisting, as I said in my testimony, we are really looking at persistence over time. So I think it's not only what you had today but can you demonstrate based on the popu-

lation over several years of sampling that your population is stable or it's increasing.

Mr. GIBBONS. Well, let me say that the population stability was never studied by you because there was no data that indicated the population stability over time was decreasing. That wasn't part of your decision factor. They indicated here that their estimates, this American Society of Fisheries, gave an estimated number and said, well, because it is below 2,000, it is unlikely that it will survive.

How are you going to get the population to grow? What are you going to do to get it to grow?

Mr. WILLIAMS. I'd like to add a couple things. No. 1, I think that's why it's so important as the recovery team starts to come up with what we believe to be approved methodology that gets us to statistical reliability so we can track populations total over time. Second, I think that by improving habitat, by working on some of the things that were identified as threats, that I think that we can improve habitat which basically helps build the population over time.

So with improvement of habitat, to me is the key that helps establish and brings back the native species or brings back populations, and we can start documenting that over time. And I believe in the science of the viability population analysis that says you need X number of adults and juveniles and young fish over time, and then you will basically have a stable population. If the scientists come back, the team comes back and says this is what we need and here are some recovery activities for the habitat, we put it in a plan, in the Service's policy about a deal is a deal is real, and we'll delist the species.

Mr. GIBBONS. When you testified earlier you indicated a number of things that you believe were a factor, preexisting mining, preexisting large woody removal from the stream. Is large woody removal from the stream being conducted today, or in the recent past, last week?

Mr. WILLIAMS. Is it being investigated?

Mr. GIBBONS. Is large woody debris removal currently being conducted from the east fork of the Jarbidge River?

Mr. WILLIAMS. I don't know specifically whether it's being done. I think it has been done in the past as a way to clear the channel out and make sure that some of the storm events—not storm—flood events like '95 didn't occur. That is I think information that we receive probably from the Forest Service as part of the listing package.

Mr. GIBBONS. Going back to your delisting process, what can we do, what can the community do, what can Congress do in the meantime to help the species?

Because these people out here want to do it as fast as possible. They don't want to wait till every one of them is dead and their grandchildren say we still have the endangered trout, and 2,000 years old and we're waiting for the next Ice Age. They want to move forward, and if we can do something, we want to know what it is we can do.

Mr. WILLIAMS. I believe that—well, the listing or delisting process is critical in terms of bringing in stakeholders and working with partners. There is no way—and we know that we cannot

delist the species by ourselves. So it requires us, and we need to engage the local community at whatever level they are willing to engage with us in terms of doing that.

I think coming up with things like an improved road maintenance program, working with Elko County and the citizens, is there a better way to grade the road, to have access into Jarbidge without sidecasting material. Is there a better way to provide wood for the campers and the people that go up there rather than just let them top down a dead or dying bush or a limb off the tree. I think that there are ways working with the Forest, working with BLM, working with the community to build a recovery plan that we can all embrace and we can all work together at delisting the species as quick as possible.

Mr. GIBBONS. Explain to me and this Committee why your agency has the sole authority to list something which you said you cannot delist it by yourself.

Mr. WILLIAMS. I guess to me the simple answer to that is the Congress in the passing of ESA entrusted that responsibility to the Secretary. The Secretary of Interior is entrusted the regulatory aspects or the Endangered Species Act implementation to Fish and Wildlife Service.

Mr. GIBBONS. Are you afraid you will be sued?

Mr. WILLIAMS. Excuse me?

Mr. GIBBONS. Are you afraid you will be sued if you attempt to delist this bull trout?

Mr. WILLIAMS. You mean right now without having—.

Mr. GIBBONS. I mean, are lawsuits part of your consideration why you either list something or don't list something?

Mr. WILLIAMS. Not really. I think we are certainly moved and are directed all the time by Court to list things. But as a normal day-to-day business for myself working in my office, no, not at all. In fact—.

Mr. GIBBONS. That is because you have free lawyers, is what you are saying. You have taxpayer paid lawyers.

Mr. WILLIAMS. If I could go on a little bit. I mean, I look as an agent of the Fish and Wildlife Service responsible working in the State of Nevada, I work and look hard for ways to do everything but list species. Listing in a lot of ways is a no-win situation.

And I would rather work with the community, and there are examples within the state where we have worked with the community to not list species, such as the Amargosa toad. We are working right now on the relic frog down in Clark County to not have to list that species, in the face of a petition right now from a group, Center for Biological Diversity, that I think the next step is to sue us. But I'm still forging ahead trying to get a plan in place where we don't have to list that species.

Mr. GIBBONS. And I think that's a very very wise and prudent place for your agency to be working. I mean, that to us is never let the species get to that point.

Mr. WILLIAMS. Right.

Mr. GIBBONS. And all I can say is I certainly hope that you are also doing the same heavy lifting in keeping the sage hen or the sage grouse from being listed as an endangered species as well. That's something I think we can work on and prevent and never

have to stumble through that serious problem down the road as well.

Mr. Vaught, you have sat there for a long time, very patiently, haven't been asked a question. Let me just throw one at you, just softball.

Does the Forest Service have, or even BLM, if you know, because that's not in your prerogative, but does Forest Service, an agency like yours, have an improved road maintenance plan?

Mr. VAUGHT. The settlement agreement that I previously described has a responsibility that the Forest Service is kind of the lead for, but all of us as a part of the settlement agreement are going to work to accomplish really three major things within that settlement agreement, which are in answer to your question. The first is resolution of the roads issue, of course. The second is very specific habitat improvement projects that can and should be completed on the Jarbidge River system and the South Canyon Road area. And the third is a road maintenance and improvement plan that we work together on with the county to identify and implement.

I do believe that resolution of those three issues will go a long way in dealing with the delisting issues as well.

Mr. GIBBONS. Wonderful.

Gentlemen, especially Mr. Williams, you have been the subject of my questioning now for a considerable period of time, and I greatly appreciate your patience and your answers as well, and I have got a number of additional questions that I have, but rather than keep you here and keep you in the limelight and the hot seat, so to speak, what I'd like to ask is if I could submit written questions to you and have you return them to the Committee within, say, a reasonable period of time. Thirty days ought to give you time to answer some of these questions. They shouldn't be too difficult questions, and we will do that.

Mr. WILLIAMS. Sure.

Mr. GIBBONS. I will submit them to you in writing through the Committee process, and would appreciate both of you responding to any questions that come to you appropriately. With that, let me thank you for your work and your presence here today, your testimony that you have given us. I will excuse you now at this point and call up our third panel. Thank you, gentlemen.

Our third panel today is going to consist of Gene Weller, the Deputy Administrator of the Nevada Division of Wildlife, Nevada Department of Conservation and Natural Resources; Dennis Murphy, professor, Department of Biology, University of Nevada Reno; Steve Trafton, Western Native Trout coordinator for Trout Unlimited, the California chapter; Bert Brackett, a cattle rancher from Flat Creek ranch.

Gentlemen. Well, Mr. Weller, we will begin with you going from left all the way down the list and have you each testify, and we would like to have you summarize your testimony as you heard others, and we will submit your full and complete written testimony for the record.

Mr. Weller, welcome. The floor is yours.

STATEMENT OF GENE WELLER, DEPARTMENT ADMINISTRATOR, NEVADA DIVISION OF WILDLIFE

Mr. WELLER. Thank you, Congressman Gibbons. Good afternoon to you.

My name again for the record is Gene Weller. I am a 30-year plus employee with Nevada Division of Wildlife. My current position is Deputy Administrator with that agency.

But I bring a perspective to this hearing that's a little broader. At the time of the events in question, I was the local program biologist in this area. So I have a lot of personal firsthand experience in there. I believe I can bring a good deal of history to these proceedings.

And I thank you for the opportunity to testify and including my complete testimony in the hearing record.

By Nevada statute, fish and wildlife in their natural habitats are part of the natural resources belonging to the people of the State of Nevada. The Division of Wildlife is charged with the preservation, protection, management and restoration of that wildlife and its habitat. In accordance with this legislative mandate, the Division is responsible for the fish populations in the Jarbidge River system which is under consideration today.

As early as 1954, the then Nevada Fish and Game Commission was monitoring and actively managing the fish populations of the Jarbidge River system. That activity is continued to the present. The results of those ongoing investigations are maintained in individual reports, files and annual job progress reports and are available for public inspection.

On August 11th, 1998, as a direct result of work by Elko County to reconstruct the South Canyon Road on the west fork of the Jarbidge River, the Jarbidge River bull trout was listed as an emergency endangered species under the authority of the Endangered Species Act. The emergency endangered classification is a temporary one, normally used only when a species is in immediate peril of extinction. The Division of Wildlife disagreed with the emergency listing because the reach of the Jarbidge River immediately affected by the county's actions is not critical to the survival of the Jarbidge River distinct population segment of bull trout.

You mentioned in your definitions earlier before the difference between focal and nodal habitats. We would say that the area in question was indeed a nodal habitat, not a focal habitat. There is a big difference there. I'll address that as I go through.

In April 1999, when the emergency endangered listing expired, the bull trout was listed by the U.S. Fish and Wildlife Service as a threatened species. The Division of Wildlife after careful consideration of the biological status of the species opposed this listing because, in our opinion, the five threats criteria which we have talked about before defined in the Act for listing the species are not supported.

Virtually all of the critical bull trout habitat in Nevada, that focal area of the species, is located deep within the Jarbidge wilderness area. It's hard to see on this map but it is designated in the darker green there, if you look closely, where impacts by man are virtually nonexistent. There is currently no grazing, mining, recreation or other land use impacts to bull trout populations within

that wilderness area. More temperature tolerant adult Jarbidge bull trout are indeed migratory and seasonally inhabit lower reaches of the Jarbidge River as the South Canyon Road and below. However, naturally higher water temperatures discourage year-round bull trout habitation of these areas. It becomes a nodal area.

Bull trout are a glacial relic, and they are dependent upon cold clear water between 40 and 51 degrees Fahrenheit, moderate stream gradients of less than 12 percent, and suitable stream flows of more than one cubic feet per second for spawning and rearing. These exacting habitat conditions are naturally limited in the Jarbidge River system in Nevada. However, Division studies show that where these habitat conditions prevail in the Jarbidge, bull trout exist in reasonable and viable numbers.

Bull trout are classified as a game fish in the state of Nevada, but there is currently a regulation that prohibits harvest by fishermen. Fish disease testing in the drainage has revealed no harmful or threatening pathogens. The Division does not stock hatchery trout in the Jarbidge River. There are no competing or hybridizing species present in the river.

Evidence collected by the Division suggests that there are minimum of three genetic subpopulations in the Jarbidge system, which mitigates threats to the population from natural disasters and ensures genetic diversity within the population as a whole. Recent discoveries of wandering bull trout, adult bull trout in less suitable reaches of the system support our confidence in the role of the Jarbidge River metapopulation to recolonize itself in case of a stochastic event.

The definition of threats in the 1999 final rule cannot be supported. Even the rhetoric of the final rule contradicts itself, as you pointed out, by explaining that most of the identified threats to the persistence of bull trout are a problem in other portions of the bull trout's range but not in the Jarbidge.

The Division has further argued that even if the threats defined in the listing rule were real, there are virtually no practical management actions which could be applied to remedy them due to the protected nature of the existing populations and the near pristine condition of their primary habitats. There are no significant threats to the Jarbidge River distinct population segment of bull trout.

We currently have a listed species in the Jarbidge River with no conceivable means to delist it. Yet the Division and others are now obligated to divert significant resources to meaningless recovery efforts for the bull trout.

The Division has determined from extensive biological investigations before and after the final rule that bull trout in the Jarbidge system are relatively well distributed throughout the system and are secure in those habitats. Habitat surveys conducted by the Division of Wildlife document good to excellent aquatic and riparian habitat conditions throughout the system. Ongoing fish surveys show fish populations, including redband trout, mountain whitefish, suckers, dace and bull trout that are robust, well distributed, and stable or increasing relative to past surveys. This is consistent with and supports the data presented to the Fish and Wildlife Service at the time of the listing decision.

The Division utilizes proven inventory methods and population estimation protocols that accurately portray the status and trend of fish populations. Competent trained biologists of the Division of Wildlife have walked every mile of bull trout habitat in the Jarbidge River system. I would hazard to say that we are the only ones who have done so.

Division personnel are the most knowledgeable people on this planet about the bull trout in the Jarbidge. Our knowledge is formidable, not based on reading a report or a treatise on life history but by walking the streams and handling the fish.

From that practical knowledge base as well as our substantial data, Division biologists have maintained from the onset that bull trout populations of the Jarbidge are secure and continue to reside in low numbers in a disjunct distribution. That distribution represents the preferred flow and temperature criteria for year-round bull trout occupation. We are aware—we are aware—unaware of any declining or lost populations since we have been conducting surveys in the Jarbidge drainage. I would remind you that the Endangered Species listing criteria notes that, quote, "rarity in and of itself is not adequate reason for listing."

In conclusion, the Division of Wildlife, based upon scientific data holds, that the Jarbidge River bull trout populations are now and were at the time of their listing viable. They are not teetering on the brink of extinction because of the actions of man.

Indeed, the protection already afforded bull trout by the Jarbidge Wilderness designation has probably mitigated most human influences leaving the future of bull trout in the Jarbidge River system subject only to natural evolutionary processes. If the fish disappears in the unforeseeable future, it will be because as a glacial relic, it is going the way of glaciers. Until then, bull trout are an important part of Nevada's wildlife resources, and the Division of Wildlife stands ready to manage them accordingly without the unnecessary protection of the Endangered Species Act.

I thank you for this opportunity to testify, and I will gladly answer any questions you have.

[The prepared statement of Mr. Weller follows:]

Statement of Gene Weller, Deputy Administrator, Nevada Division of Wildlife

Good morning, Mr. Chairman, Committee members. My name is Gene Weller. I am a thirty plus year employee of the Nevada Division of Wildlife, and my current position is Deputy Administrator. I bring an added perspective to this hearing, as I was the local Fisheries Program Supervisor here in Elko when the whole bull trout controversy started back in the mid–1990's. I believe I can bring a great deal of history to these proceedings. Thank you for the opportunity to testify.

By Nevada statute, fish and wildlife in their natural habitat's are part of the natural resources belonging to the people of the State of Nevada. The Division of Wildlife is charged with the preservation, protection, management, and restoration of that wildlife and its habitat. In accordance with this legislative mandate, the Division is responsible for the fish populations of the Jarbidge River system, which is under consideration here today. As early as 1954, the then Nevada Fish and Game Commission was monitoring and actively managing the fish populations in the Jarbidge River system. In 1992, in direct response to a growing regional concern about the range-wide status of bull trout, the Department of Wildlife embarked upon an exhaustive inventory of the trout in the Jarbidge River system in Nevada with specific emphasis on bull trout. This study was completed in 1994, and results were made public in an unpublished Department report entitled The Status of Bull Trout in Nevada (Johnson and Weller 1994). Beginning in 1998, another exhaustive

survey of the Jarbidge River fish populations was undertaken by the now Division of Wildlife. The results of this study are summarized in yet another Division publication entitled The Status of Bull Trout in Nevada (Johnson 1999). I have included copies of each report in my testimony support materials. Since that time, the Division has continued in its efforts to discern the biological status and trend of the Jarbidge River bull trout population. The results of these investigations are maintained in Division files and annual job progress reports. The information I am providing you today is drawn primarily from the 1994 and 1999 status reports as well as more current information.

On August 11, 1998, as a direct result of work by Elko County to reconstruct the South Canyon road on the West Fork of the Jarbidge River, the Jarbidge River bull trout was listed as an "emergency endangered" species under the authority of the Endangered Species Act. The "emergency endangered" classification is a temporary one, normally used only when a species is in immediate peril of extinction. The Division of Wildlife disagreed with the emergency listing because the reach of the Jarbidge River immediately affected by the County's actions is not critical to the survival of the Jarbidge River Distinct Population Segment of bull trout. In April 1999, when the "emergency endangered" listing expired, the bull trout was listed by the U.S. Fish and Wildlife Service as a "threatened" species. The Division of Wildlife, after careful consideration of the biological status of the species, opposed this listing because, in our opinion, the five criteria defined in the Act for listing a species are not supported. Those five criteria are:

1. The present or threatened destruction, modification, or curtailment of its habitat or range;
2. Over-utilization for commercial, recreational, scientific, or educational purposes;
3. Disease or predation;
4. The inadequacy of existing regulatory mechanisms; and
5. Other natural or manmade factors affecting its continued existence.

It is our contention, and has been since the listing occurred three years ago, that the Jarbidge River bull trout populations in their present or future states are not subject to the aforementioned threats; neither is the species imperiled unto extinction.

Virtually all the critical bull trout habitat in Nevada is located deep within the Jarbidge Wilderness Area where impacts by man are virtually non-existent. There are currently no grazing, mining, recreational or other land use impacts to bull trout populations within the wilderness area. More temperature tolerant adult Jarbidge bull trout are migratory, and seasonally inhabit lower reaches of the Jarbidge River such as the South Canyon Road site; however naturally higher water temperatures discourage year around bull trout habitation in these areas. Bull trout are a glacial relict, and they are dependent upon cold clear water between 40δ to 51δF, moderate stream gradient of less than 12%, and suitable stream flows of more than one cubic feet per second for spawning and rearing. These exacting habitat conditions are naturally limited in the Jarbidge River system in Nevada; however, Division studies show that where these habitat conditions prevail in the Jarbidge, bull trout exist in reasonable and viable numbers.

Bull trout are classified as a game fish in the State, but there is currently a regulation that prohibits harvest by fishermen. Fish disease testing in the drainage has revealed no harmful or threatening pathogens. The Division does not stock hatchery trout in the Jarbidge River. There are no competitive or hybridizing species present in the river. Evidence collected by the Division suggests there are a minimum of three genetic subpopulations in the Jarbidge system, which mitigates threats to the population from natural disasters, and insures genetic diversity within the population as a whole. Recent discoveries of "wandering" adult bull trout in less suitable reaches of the system support our confidence in the role of the Jarbidge River metapopulation to recolonize itself in the event of a stocastic event.

The definition of threats in the 1999 final rule cannot be supported. Even the rhetoric of the final rule contradicts itself by explaining that most of the identified threats to the persistence of bull trout are a problem in other portions of the bull trout's range, but not in the Jarbidge. The Division has further argued that even if the threats defined in the listing rule were real, there are virtually no practical management actions which could be applied to remedy them, due to the protected nature of the existing populations and the near pristine condition of their primary habitats. There are no significant threats to the Jarbidge River Distinct Population Segment of bull trout. We currently have a listed species in the Jarbidge River with no conceivable means to delist it. Yet the Division and others are now obligated to divert significant resources to meaningless recovery efforts for the bull trout.

The Division has determined from extensive biological investigations before and after the final rule that bull trout in the Jarbidge River system are relatively well

distributed throughout the system and are secure in those habitats. Historical data indicates bull trout have always had a limited presence in this system; however, where there is adequate habitat, primarily water temperature related, there are bull trout. Studies also document that current habitat conditions are infinitely better than those of recorded history when the Jarbidge River environs were subjected to severe degradation from livestock grazing and mining. The records conclusively show that the Jarbidge River system was severely over-grazed by livestock between the mid–1880's to about 1930. Gold was discovered in Jarbidge Canyon in 1909, with an influx of miners and other fortune seekers beginning to invade the area during the spring of 1910. The drainage was heavily prospected and mined for about the next 10 years with several successful mining and milling operations operating in the immediate vicinity of the river. During this period, living conditions for trout in the river were extremely poor, and trout survival and persistence was tenuous. If the fish could persist in the severely degraded habitat conditions of the late 1800's and early 1900's, they surely will flourish in the vastly improved conditions of today.

Today, habitat surveys conducted by the Division of Wildlife document good to excellent aquatic and riparian habitat conditions throughout the system. Areas with localized grazing problems are being addressed and are seldom in critical bull trout habitat anyway. As you can see from the distribution maps, the majority of focal or critical bull trout habitat (designated in dark blue) is located deep within the Jarbidge Wilderness. Mining is non-existent in the area. While sedimentation from road construction and maintenance are always an issue with fish survival, those areas in the Jarbidge system with road issues are outside the critical bull trout habitats. Even the role of migratory fluvial bull trout is not overtly jeopardized by sedimentation from roads because of timing. Fluvial bull trout typically migrate to cooler water in the spring when high flows mitigate the effects of sediments. Spawning and rearing take place during the fall and winter months in protected upstream reaches of streams devoid of roads and their impacts.

Ongoing fish surveys show fish populations including redband trout, mountain whitefish, suckers, dace and bull trout that are robust, well distributed, and stable or increasing relative to past surveys. This is consistent with, and supports, the data presented to the Fish and Wildlife Service at the time of the listing decision. The Division utilizes proven inventory methods and population estimation protocols. While not as statistically valid as research protocols, the methods used by the Division are considered totally adequate for management purposes, and they accurately portray the status and trend of fish populations. Competent, trained biologists of the Division of Wildlife have walked every mile of bull trout habitat in the Jarbidge River System. I would hazard to say we are the only ones who have done so. Division personnel are the most knowledgeable people on this planet about the bull trout in the Jarbidge. Our knowledge is formidable, not based on reading a report or a treatise on life history, but by walking the streams and handling the fish. From that practical knowledge base as well as our substantial data, Division biologists have maintained from the onset that bull trout populations of the Jarbidge are secure and continue to reside at low numbers in a disjunct distribution. That distribution represents the preferred flow and temperature criteria for year-around bull trout occupation. We are unaware of any declining or lost populations since we have been conducting surveys in the Jarbidge Drainage. I would remind you that Endangered Species listing criteria notes that "rarity in and of itself is not an adequate reason for listing."

It is unfortunate that the South Canyon road issue and the bull trout are being considered together. There is little doubt that roads in the immediate vicinity of streams are characteristically deleterious to fish populations. Sedimentation, pollution and channelization normally associated with roads are real threats to fish populations. The Division of Wildlife has consistently opposed the redevelopment of the South Canyon road; however, our opposition is not based on the potential extirpation of bull trout, but the negative impact roads typically have on all aquatic fish and wildlife species. The redevelopment of the South Canyon road will not press the bull trout nor any other species in the river over the brink of extinction, nor is the threat of that redevelopment grounds for a listing of the bull trout as a threatened species under the auspices of the Endangered Species Act of 1973. We object strenuously to the improper and unethical use of bull trout as a surrogate.

In conclusion, the Division of Wildlife, based upon scientific data, holds that the Jarbidge River bull trout populations are now and were at the time of their listing, viable. They are not teetering on the brink of extinction because of the actions of man. Indeed, the protection already afforded bull trout by the Jarbidge Wilderness designation has probably mitigated most human influences, leaving the future of bull trout in the Jarbidge River system subject only to natural evolutionary processes. If the fish disappears in the unforeseeable future, it will be because as a gla-

cial relict, it is going the way of the glaciers. Until then, bull trout are an important part of Nevada's wildlife resources, and the Division of Wildlife stands ready to manage them accordingly, without the unnecessary protection of the Endangered Species Act.

Thank you for this opportunity to testify. I will gladly entertain your questions.

Support Materials:

1. The Status of Bull Trout in Nevada (Johnson 1999). [This document has been retained in the Committee's official files.]
2. The Status of Bull Trout in Nevada (Johnson, Weller 1994). [This document has been retained in the Committee's official files.]
3. Copy of Division of Wildlife letter to the U.S. Fish and Wildlife Service opposing the ESA listing of bull trout dated October 5, 1998. [This document has been retained in the Committee's official files.]

Mr. GIBBONS. Thank you, Mr. Weller. Excellent statement.

Professor Murphy, welcome and happy to have you. I'm a University of Nevada alumni myself and proud that you are there. You might want to tell the audience your background and experience or your expertise so that when you begin your testimony they can get acquainted with you.

STATEMENT OF DENNIS MURPHY, PROFESSOR, DEPARTMENT OF BIOLOGY, UNIVERSITY OF NEVADA, RENO

Mr. MURPHY. Thank you, Congressman Gibbons. I'll do that. My name is Dennis Murphy. I'm the Director of the Ph.D. Program in ecology, evolution and conservation biology—I won't give you the acronym to all of that—at the University of Nevada, Reno.

Pertinent to this hearing I'm actually the Past President of the International Society for Conservation Biology. I served on the interagency's spotted owl scientific committee which was convened in the late '80's, early '90's, to deal with that issue. More recently I headed up the approach in California which created the natural community's conservation planning effort to take care of the California gnat catcher.

I have also been team leader in your own backyard of the Late Tahoe watershed assessment, and we delivered that 1,100 page assessment of the status of Tahoe's resources in 1999. And finally, I think quite pertinent to this hearing, I was selected by the National Academy of Sciences to serve the GAO in the review of the desert tortoise listing and recovery plan on request of this same House Committee.

In an effort to stay brief I'll skip a little of my background information beyond that to suggest that we have got technical experts on either side of me that are going to weigh in on many of these technical issues, but I did in these few comments want to set the listing of the bull trout in the context of other listings of species in the West. We should note that the Jarbidge bull trout with no more than eight extant demographic units is truly severely in peril by any measure. The sizes of the remnant populations are frightening small, and that is on the basis of accounts by all the experts. We're looking at dozens of fishes to hundreds of fishes in each of those eight demographic units.

Those populations by any assessment are well within the range of expected stochastic and that is random events such as droughts, deluge, landslides and wildfires that commonly cause species to go extinct locally when populations are of those size. The apparent

desperate sensitivity of the bull trout to environmental variation, its need for extraordinarily cold waters for reproduction, its highly fragmented distribution, its susceptibility to inevitable future climate changes, all make this species worthy of some Federal protection.

There is a good question that might be asked, and we probably won't answer it here, but why was the species tendered threatened status and not the higher statutory and regulatory standard endangered status. The Jarbidge bull trout is by most measures more perilous in terms of its current circumstances than a great many listed endangered species. But instead it has threatened status, similar to the desert tortoise, the northern spotted owl, the marbled murrelet, and a number of other species that actually have multistate distributions.

Listing of those species certainly were also controversial and received intense scrutiny including scientific review and legal challenge, and they like the bull trout were shown to be on a clear and unhalted slide toward disappearance. At the time of the listing the question of peril for the bull trout was not when—excuse me—was not when—excuse me—was not if but when the trout would actually vanish.

Now perhaps lost in arguments over how many individual bull trout remain is the true measure of risk to the species. It is not its current status per se, but population trends that should concern us regarding the bull trout in the Jarbidge mountains and elsewhere. This species undoubtedly has declined from historical numbers of both population and of individuals. Much of that decline undoubtedly occurred before any of the counts that have been provided to the Fish and Wildlife Service were made from Nevada.

But many key details, and this is important, many key details of trout biology and the state of the habitat to support it remain unknown. Those uncertainties don't compromise or invalidate the listing decision, but they do challenge planners who should right now be working to recover the species and remove it as promptly as possible from the Federal list.

Where current science is going to come up short in this controversial conservation effort is not in the listing per se but in the follow through, after the listing actions. We do not know enough today to chart a reliable course for this species to recovery. Recovery of the bull trout will have to be informed by new information on the species' physiological tolerances, on its ecological interactions with its habitat and other species, and on metapopulation, that is between population dynamics across the Jarbidge system.

Until good science can reduce uncertainties about the bull trout, we will be able to do very little to improve its circumstances.

The linked issues of science and uncertainty in the Endangered Species Act are clearly issues of importance to this Committee, as evidenced by this hearing and the GAO review of the desert tortoise actions. As you know, Congress required the Departments of Interior and Commerce that listings of species be informed, as you said, by the best available scientific and commercial data. Correspondingly, I can offer you no examples of species that have been listed without justification and without a preponderance of data, even when data are limited, that support that Federal action.

That the Fish and Wildlife Service has never had to reverse a listing or has had courts intervene to do so reflects the typical use of the best available information in new listings. But listing is not where science is missing in act and implementation.

The statute unfortunately offers no specific direction on the use of science and actions that accompany and follow listings, including the designation of critical habitat, the development and implementation of recovery plans, establishment of habitat conservation plans under section 10(a), and certainly in conversations between agencies under section 7. These are the real contexts in which the prohibitions of the Act's section 9 affect stakeholders, where the benefits of listing are supposed to serve the bull trout and where the real impacts of the listing are going to affect the Elko County residents and other Nevadans.

The resource agencies struggle in these areas to bring good products forward, but absent explicit guidelines for applying science, without staff support trained in cutting-edge applications, and with virtually no funding to bring in outside expertise, scientific input into agency implementation efforts is inevitably hit and miss.

It would be easy to direct the agencies just to submit their proposed actions to some version of scientific, and we can call it peer review, probably involving academic and consulting scientists, but the proliferation of agency actions in much of the West and certainly in California make that proposition unwieldy at best. The statute really needs to give the agencies clear direction for the use of science, under which circumstances and how science should inform their actions. In turn, the agencies need to draw roadmaps for bringing better and more reliable defensible knowledge to their decisions and actions through better articulated regulations and standards of performance.

Having heard the bell, I wanted to close by pointing out that I would rather be remiss not to note that we have been blessed by Fish and Wildlife Service field office here. It is remarkably competent and reasonable. My experience in California has not nearly been as pleasurable as it is here in the state of Nevada.

I want to keep in mind that the noise surrounding the listing of the bull trout is really more of a glaring exception than the rule in the state of Nevada, reminding folks that the Jarbidge bull trout was the first species restricted solely to Nevada that's been listed since 1985. The only listings in Nevada in the '90's other than the bull trout were actually the desert tortoise and the southwest willow fly catcher, and those listings were really precipitated because of circumstances beyond this state.

And I wanted to point out that and the facts resonate that in 1993 this state was fourth in the Nation in candidates for endangered species listing, and remains today third out of 50 states in amphibians at risk, and fourth in the Nation in plants and fish at risk. And I do think that we have shown elsewhere in the state, the mention of the Amargosa toad in the last panel is an example, the Tahoe yellowcrest up at Lake Tahoe, both species kept off the list through the cooperation of stakeholders, scientists, agency folks, both in land and resource, and I think if we can use those as exemplars of dealing with these problems, we're going to be in very good stead.

[The prepared statement of Mr. Murphy follows:]

Statement of Dennis D. Murphy, Director of the Graduate Program in Ecology, Evolution and Conservation Biology at the University of Nevada, Reno

My name is Dennis Murphy. I am director of the graduate program in Ecology, Evolution, and Conservation Biology at the University of Nevada, Reno. Pertinent to this hearing, I am past president of the international Society for Conservation Biology, served on the Interagency Spotted Owl Scientific Committee, was chief architect of California's Natural Community Conservation Planning Program, was team leader of the Lake Tahoe Watershed Assessment, and just two weeks ago served the National Academy of Sciences in assistance to the GAO in its review of the original listing and subsequent recovery plan for the desert tortoise - - that effort in response to a request from this House Committee to consider the reasonableness of that listing, much as you consider the reasonableness of the bull trout listing today.

The Jarbidge bull trout is a species known to few Americans, but it is hardly the most obscure species to make headlines during the thirty years of conservation planning under the Endangered Species Act of 197 3. The listing of an obscure fish, the snail-darter, was challenged in 1976 all the way to the Supreme Court, where the strength of the then fledgling statute was affirmed. The first species to cause real conflict on private property was the mission blue, a butterfly the size of a dime found in an urbanized habitat in the San Francisco bay area. And a drab six gram bird that meows like a kitten, the California gnatcatcher, has required developers to spend hundreds of millions of dollars to mitigate its habitat losses, and created a crisis in land use that makes our Nevada conflicts look trivial. Those listings and those of many dozens of other species both grand and seemingly trifling have caused similar consternation among landowners, recreationalists, and committed opponents of big federal government. While opposition to the ESA and its implementation has often been as heartfelt elsewhere, it has rarely been quite as loud as here in Elko County, Nevada - which, of course, makes a measured discussion of science and bull trout that much more important.

Other technical experts from the resource agencies and academia have weighed and will weigh in on the question of the appropriateness of the Jarbidge bull trout listing. I set my opinion here in the context of other animal listings in the western states during the past decade. The Jarbidge bull trout, with no more that eight extant demographic units (and probably no fewer than four, is severely imperiled by any measure. The sizes of the remnant populations are frighteningly small by the accounts of all the expert - - just dozens to hundreds of individual fish. These populations are well within the size range at which expected stochastic environmental events, droughts, floods, landslides, and wildfires very commonly cause species to disappear, even without the helping hands of humans. The apparent desperate sensitivity of Jarbidge bull trout to environmental variation, its need for extraordinarily cold waters for reproduction, its now highly fragmented distribution, its susceptibility to inevitable future climate changes, all make the species worthy of federal protection. And, actually, a fair question might be asked - - why was the species tendered threatened status and not the higher regulatory standard, endangered status. The Jarbidge bull trout is by most measures in more perilous circumstances than a great many listed endangered species; instead it has threatened status similar to the desert tortoise, northern spotted owl, marbled murrelet, and a number of other species with multi-state distributions and much greater likelihoods of survival. Listings of those species also were controversial and received intense scrutiny, including scientific review and legal challenge, and they like the Jarbidge bull trout were shown to be on a clear and unhalted slide toward disappearance. At the time of its listing the question of peril for the bull trout was not if, but when, this vanishing species would finally vanish.

Perhaps lost in arguments over exactly how many individual Jarbidge bull trout remain is the true measure of the risk to the species. It is not its current status, but population trends that should concern us about the bull trout in the Jarbidge mountains and elsewhere. The species undoubtedly has declined from historical numbers of both populations and individuals in those populations. Much of that-decline may have occurred before any recorded studies of the fish in Nevada. But many key details of bull trout biology and the state of the habitat that supports it remain unknown. Those uncertainties do not compromise or invalidate the listing decision, but they do challenge planners who should be working to recover the species and remove it as promptly as possible from the federal list.

Where current science is going to come up short in this controversial conservation effort is not in the listing of the bull trout but in the follow though, the after the listing actions. We do not know enough today to chart a reliable course for this species to recovery. Recovery of the bull trout will have to be informed by new information on the species' physiological tolerances, on ecological interactions between the trout and its habitat and other species, and on metapopulation dynamics across the broad Jarbidge landscape. Until good science can reduce uncertainties about the bull trout, we will be able to do very little to improve its circumstances.

The linked issues of science and uncertainty in Endangered Species Act implementation is clearly an issue of importance to this committee, as evidenced by this hearing and the GAO review of the desert tortoise actions. As you know Congress required of the Departments of the Interior and Commerce that listings of species be informed by "the best available scientific and commercial data." Correspondingly, I can offer you no examples of species that have been listed without justification and without a preponderance of data that support federal action. That the U.S. Fish and Wildlife Service and National Marine Fisheries Service have never had to reverse a listing, or had the courts intervene to do SO , reflects their typical use of the best available information in new species listings. But listing is not where science is missing in Act implementation.

The statute unfortunately offers no specific direction on the use of science in actions that accompany and follow listings, including the designation of critical habitat, development and implementation of recovery plans, establishment of habitat conservation plans under section 10(a) of the Act, and conservation between agencies under section 7. These are the contexts in which the prohibitions in the Act's Section 9 affect stakeholders, where the benefits of listing serve the bull trout itself and where the real impacts of the listing affects Elko County residents and other Nevadans. The resource agencies struggle in these areas to bring good products forward, but absent explicit guidelines for applying science, without staff support. trained in cutting edge applications, and with virtually no funding to bring in outside expertise, scientific input into agency implementation efforts is inevitably hit or miss.

It would be easy to direct the agencies to submit their proposed actions to some version of scientific "peer" review, probably involving academic and other consulting scientists, but the proliferation of agency actions in much of the west, and certainly in California, make that proposition unwieldy at best. The statute needs to give the agencies clearer direction for the use of science—under which circumstances and how science should inform their actions. In turn, the agencies need to adumbrate roadmaps for bringing reliable and defensible knowledge to their decisions and actions through better articulated regulations and standards of performance. The criteria promulgated by the ESA agencies in the Federal Register 9 March 1999, intended to provide clarifying guidance to habitat conservation planning, may provide model language for new statutory directives and regulations that invoke science.

Out in the great expanses of rural Nevada, I would be remiss not to note that the state has have been blessed with a Fish and Wildlife Service field office that is almost uniquely competent and reasonable. The rant and fustian that has accompanied the listing of the bull trout is not the course of regular business in Nevada, it is a glaring exception. The Jarbidge bull trout is the only new federal listing of an organism restricted to Nevada since 1985. The only listings in Nevada in the 1990s other than the bull trout were the desert tortoise and southwest willow flycatcher, two species in much more trouble outside of our state. These facts should resonate in a state that ranked fourth in the nation for candidate species for protection in 1993, and today ranks third in amphibians at risk, and fourth in plants and fishes vulnerable to extinction. Through cooperation between land and resource managers, scientists, and stakeholders, imperiled species have been protected without listing actions in Nevada. Two species at equally great risk of extinction as the bull trout, the Amargosa toad in Nye County and Tahoe yellow cress at Lake Tahoe, show that trading shovels for dialogue can have a win-win result, having benefitted from collaborative efforts and conservation strategies that have kept them off the federal list.

I hope that the concern expressed by the Resources Committee in their request for review of desert tortoise and bull trout listings be expanded to consider science in other aspects of Endangered Species Act implementation and the funding that will be necessary to support that science. I am glad to answer questions about technical issues pertinent to the bull trout listing, and hope that experiences in conservation planning elsewhere in our great state can be used to inform the challenge of saving this very special fish species.

Mr. GIBBONS. Very good, Professor.

Mr. Trafton, welcome. The floor is yours.

STATEMENT OF STEVE TRAFTON, WESTERN NATIVE TROUT COORDINATOR, TROUT UNLIMITED

Mr. TRAFTON. Thank you. Mr. Chairman, Trout Unlimited thanks you for the invitation to testify here today. Trout Unlimited is an organization of 130,000 members organized into more than 450 local chapters nationwide. Our mission is to conserve, restore and protect America's trout and salmon fisheries and their watersheds. We have a long history of working with local communities, landowners, and state and Federal agencies.

Trout Unlimited has invested an enormous amount of volunteer effort in the Jarbidge River. Our local volunteers raised $10,000 to help build the bridge that replaced a culvert on Jack Creek that was preventing bull trout from moving upstream to spawning habitat. Trout Unlimited volunteers sponsored a fencing project on Jack Creek to protect the stream corridor. Countless hours have been spent working on stream habitat improvements and on participation in the management planning processes that affect the Jarbidge River's trout resource. We take great pride in these efforts.

Our members come from a wide variety of backgrounds, but they share a common belief in the principle that healthy watersheds are at the heart of the great trout fishing opportunities that Americans enjoy. That principle is at the heart of our work in the Jarbidge River watershed.

As your slide earlier pointed out, Trout Unlimited has not been directly involved in any of the listing processes or the litigation that resulted in the Jarbidge River bull trout's current listed status. Trout Unlimited has been involved since 1995 in an effort to protect the bull trout from the harmful sediment loading that occurs as a part of the cycle of flood damage and road repair that has been at great expense to the taxpayer the South Canyon Road's primary legacy.

Let me emphasize that our involvement has consisted from start to finish in participating in the public processes that have been established to allow citizens to have a say in the management of America's public natural resources. Trout Unlimited's attempts to highlight the precarious state of bull trout in the Jarbidge River certainly did shed light on the potential need for a listing under the Endangered Species Act. They were not the reason the species was listed however.

That decision, as we heard earlier, had been made even before Elko County's Commissioners decided to take the law into their hands and repair the road regardless of the consequences. We're all familiar with what the first consequence of that action was, an emergency listing.

It is worth noting that biology aside, the County Commissioners' actions and attitudes are ongoing proof of, in the words of the Endangered Species Act, the inadequacy of the existing regulatory mechanisms protecting bull trout. In other words, the Elko County Commissioners didn't only put the trout listing on the fast track, they were also ensuring that the bull trout stays listed for a long time.

Should the Jarbidge bull trout be a listed species? Let me state for the record that I am not a biologist. I and Trout Unlimited draw conclusions from the consultation of as wide a variety of experts as possible. In this case, the experts, with the notable exception of the Nevada Division of Wildlife, say that the species should be listed.

To cite a handful of examples, the Humboldt-Toiyabe National Forest 1998 Environmental Assessment of proposed South Canyon Road repairs stated that, quote, "It is premature to say that the population of bull trout in the Jarbidge River is stable," unquote. The Forest Service's Jason Dunham, a leading authority on bull trout, has reviewed the species status and the NDOW position on bull trout listing and twice in 1998 and again in 1999 concluded that NDOW's reasoning is flawed and that Jarbidge bull trout are indeed at risk.

In 2000, a review of NDOW's position by the Western Division of the American Fisheries Society concluded that a listing was warranted.

Finally, the U.S. Fish and Wildlife Service decided as far back as 1997, long before the South Canyon Road controversy erupted, that a listing was warranted.

Science favors the listing.

In Trout Unlimited's view, the purpose of today's hearing should not have been just another rehashing of an old topic. Is there sufficient empirical or modeling data to justify a listing? The experts answered that question a long time ago.

Incidentally, anyone, anyone who believes that Jarbidge bull trout should be delisted can petition to delist the species. If there is sufficient information out there to convince a majority of the experts that a delisting is warranted, then so be it.

I think we all know that right now that's not the case. Our focus today and our focus in the future should be on gathering whatever information we lack and making whatever improvements to habitat and management strategies that we can to ensure that Jarbidge bull trout can be delisted and stay delisted.

Trout Unlimited's work in the Jarbidge watershed has had improved habitat and stable bull trout populations as its mission from the start. Our work might once have helped to provide a reason not to list bull trout. Our work can still set us on a path toward restoring the health and vitality of this unique population of game fish.

Thank you, and I'm happy to answer any questions you might have.

[The prepared statement of Mr. Trafton follows:]

Statement of Steve Trafton, Trout Unlimited, California Chapter

Mr. Chairman, Trout Unlimited thanks you for the invitation to testify here today. Trout Unlimited is an organization of 130,000 members organized into more than 450 local chapters nationwide. Our mission is to conserve, restore, and protect America's trout and salmon fisheries and their watersheds. We have a long history of working with local communities, landowners, and state and federal agencies.

Trout Unlimited has invested an enormous amount of volunteer effort in the Jarbidge River. Our local volunteers raised $10,000 to help build the bridge that replaced a culvert on Jack Creek that was preventing bull trout from moving upstream to spawning habitat. Trout Unlimited volunteers sponsored a fencing project on Jack Creek to protect the stream corridor. Countless hours have been spent working on stream habitat improvements and on participation in the management

planning processes that effect the Jarbidge River's trout resource. We take great pride in these efforts. Our members come from a wide variety of backgrounds, but they share a common belief in the principle that healthy watersheds are at the heart of the great trout fishing opportunities that Americans enjoy. That principle is at the heart of our work in the Jarbidge watershed.

Trout Unlimited has not been directly involved in any of the listing processes or the litigation that resulted in the Jarbidge River bull trout's current listed status. Trout Unlimited has been involved, since 1995, in an effort to protect the bull trout from the harmful sediment loading that occurs as a part of the mindless cycle of flood damage and road repair that has been—at great expense to the taxpayer—the South Canyon Road's primary legacy. Let me emphasize that our involvement has consisted, from start to finish, in participating in the public processes that have been established to allow citizens to have a say in the management of America's public natural resources. We have been surprised by the extreme reaction that our position in this debate has provoked. Let us recall the basic facts: This is a mile and a half of dead-end road leading to an outhouse.

Trout Unlimited's attempts to highlight the precarious status of bull trout in the Jarbidge River certainly shed light on the potential need for a listing under the Endangered Species Act. They were not the reason that the species was listed, however. That decision had been made even before Elko County's commissioners decided to take the law into their hands and repair the road, regardless of the consequences. We are all familiar with what the first consequence of that action was: an emergency listing. It is worth noting that, biology aside, the county commissioners' actions and attitudes are ongoing proof of—in the words of the Endangered Species Act—the inadequacy of the existing regulatory mechanisms protecting bull trout. In other words, the Elko County commissioners didn't only put the bull trout listing on the fast track; they are also ensuring that the bull trout stays listed for a long, long time.

Should the Jarbidge bull trout be a listed species? Let me state for the record that I am not a biologist. I, and Trout Unlimited, draw conclusions from the consultation of as wide a variety of experts as possible. In this case, the experts—with the notable exception of the Nevada Division of Wildlife—say that the species should be listed. To cite a handful of examples: The Humboldt Toiyabe National Forest's 1998 Environmental Assessment of proposed South Canyon Road repairs stated that "it is premature to say that the population of bull trout in the Jarbidge River is stable." The Forest Service's Jason Dunham, a leading authority on bull trout, has reviewed the species' status and the NDOW position on a bull trout listing and twice, in 1998 and 1999, concluded that NDOW's reasoning is flawed and that Jarbidge bull trout are "at risk." In 2000, a review of NDOW's position by the Western Division of the American Fisheries Society concluded that a listing was warranted. Finally, the U.S. Fish and Wildlife Service decided as far back as 1997—long before the South Canyon Road controversy erupted—that a listing was warranted. It is worth noting that the Service was motivated, in part, by the concerns expressed by the Nevada Division of Wildlife that angling pressure was resulting in the harvest of significant numbers of Jarbidge River bull trout.

Science favors the listing. In Trout Unlimited's view, the purpose of today's hearing should not have been just another rehashing of an old topic. Is there sufficient empirical or modeling data to justify a listing? The experts answered that question a long time ago. Incidentally, anyone who believes that Jarbidge bull trout should not be listed can petition to delist the species. If there is sufficient information out there to convince a majority of the experts to support a delisting then so be it. We all know that that is not the case at the moment.

No, our focus today, and our focus in the future, should be on gathering whatever information we lack, and making whatever improvements to habitat and management strategies that we can to ensure that Jarbidge bull trout can be delisted, and stay delisted. Trout Unlimited's work in the Jarbidge watershed—from fundraising for the Jack Creek bridge to participating in the public processes through which management decisions are made—has had improved habitat and stable bull trout populations as its mission from the start. Our work might once have helped to provide a reason not to list bull trout. Our work can still set us on a path towards restoring the health and vitality of this unique population of game fish.

Mr. GIBBONS. Thank you, Mr. Trafton.

Mr. Bert Brackett from Idaho, Rogerson, Idaho. Thank you for driving all the way down here to Elko to participate in this.

Bert, the floor is yours.

STATEMENT OF BERT BRACKETT, CATTLE RANCHER

Mr. BRACKETT. Thank you, Mr. Chairman, for inviting me to testify at this hearing. I'm Bert Brackett. I'm representing myself, my family and our ranching operation. I'm a fourth generation rancher, and my family has ranched in the area for over 100 years. Headquarters ranch is in Three Creek, Idaho, where we winter our cattle. We summer across the state line in Nevada.

Our ranch like many others in the West is a combination of private, state, BLM and Forest Service lands, when combined together forms a viable economic unit and as such helps maintain open space, preserve natural landscapes.

I would like to share with this Committee what seems to be a real success story. It is, however, a classic example of how advocacy science can be used to further an agenda.

1993, bull trout numbers in Dave Creek, which is a major stream between the east fork and the west fork of the Jarbidge River, was estimated at 251 fish. For the next 8 years management practices stayed the same. Nothing changed except the bull trout listing. 2001, field investigation of Dave Creek reported about a thousand bull trout, over 400 percent increase.

On the surface this might appear to be remarkable recovery. But the fact of the matter is it was two separate studies with two different objectives that gathered the science to support their agenda at the time.

I would like to comment on the process that led up to the listing. In 1994, a bull trout working group was formed with the goal of being proactive, being ahead of the curve, trying to take actions that would head off possible listing under the Endangered Species Act. It was done in a collaborative fashion with a spirit of cooperation.

That all came to an end when the Jarbidge bull trout were listed on emergency basis to stifle the Jarbidge shovel brigade. That was the end of the working group, as far as I know, and consequently, the efforts of the working group were largely wasted.

Others will address the South Canyon Road situation so I'll limit my comments to effects on grazing. Listing under the Endangered Species Act opened up a whole new array of possible lawsuits and legal action. This past year we started to see radical extremist environmental groups begin to exploit the Act. We received a notice of intent to sue for grazing on our private lands. The charge is without merit, but when threatened we must defend ourselves. BLM and Forest Service also received notices of intent to sue which would force them to deny us water for our cattle which we have used for close to 50 years. The extremist goal is to end grazing on Federal land in the West, and Endangered Species Act has become the weapon of choice because it lends itself to harassment and opportunities for lawsuit.

We have and will continue to fully cooperate with the land management agencies to protect natural resources including bull trout. For example, the biological assessment for ongoing activities stated that spawning starts in September, and since our cattle were present, that fish may be adversely affected.

Our grazing permit has a season of use from July to October. We asked the Forest Service to modify our permit so we would remove

cattle from the allotment by September 1st, thereby limiting the possibility of conflict. They would not modify our permit, but they did make the change in our annual operating plan.

The burden from redundant overregulation on ranchers speaks to the socioeconomic impact caused by the listing. We have been in compliance with the rules and regulations, we're meeting the standards. So it's not about protecting the fish. This is about abuse of process with a purposeful intent to damage private citizens.

The upper end of Jarbidge watershed is wilderness. The lower is wilderness study area, wild and scenic river and ACEC for big horn sheep. So it receives layer and layer of restrictions and protections. Streams have been evaluated for PFC and are in properly operating condition. In addition, there are water quality standards set by DEQ.

For grazing, we have to meet the standards and guidelines as well as utilization levels on upland vegetation as well as riparian forage and shrubs. To add the full weight of regulation provided for in the Endangered Species Act is overkill. Most troubling is the additional avenues of harassment it opens up for radical environmentalists dedicated to ending grazing in the West.

In conclusion, is the Jarbidge River population of bull trout truly threatened? Probably not. Should it be delisted? Most definitely. Should the Act be amended to require peer review science and to prevent many of the abuses the law currently allows? Again, most definitely. Thank you for allowing me to testify. Are there any questions?

[The prepared statement of Mr. Brackett follows:]

Statement of Bert Brackett, Flat Creek Ranch, Rogerson, Idaho

Thank you Mr. Chairman for inviting me to testify at this hearing. I am Bert Brackett and am representing myself, my family and our ranching operation. I am a fourth generation rancher and my family has ranched in the area for over 100 years. Our headquarters ranch is in Three Creek, Idaho where we winter our cattle. We summer across the state line in Nevada. Our ranch like many in the West is a combination of private, state, BLM, and Forest Service lands. When combined together, it forms a viable economic unit and as such helps maintain open space and preserve natural landscapes.

I would like to share with this committee what seems to be a real success story. It is a classic example of how advocacy science can be used to further an agenda. In 1993 Bull Trout numbers in Dave Creek (which is a major stream between the East Fork and West Fork of the Jarbidge River) was estimated at 251 fish. (Johnson and Weller1994) For the next eight years management practices stayed the same; nothing changed except for the Bull Trout listing. In 2001 a field investigation of Dave Creek by Burton, Klott and Zoelick reported an estimate of about 1000 Bull Trout or a 400% increase. On the surface this might appear to be a remarkable recovery, but the fact of the matter is it was two separate studies with two different objectives that gathered the "science" to support their agenda at the time.

I would like to comment on the process that led up to the listing. In 1994 a Bull Trout working group was formed with the goal of being proactive, being ahead of the curve and trying to take actions that would head off a possible listing under the Endangered Species Act. It included numerous local, state, and federal agencies, affected ranchers and other interested public. There were several meetings a year; a number of problems identified; and projects undertaken to address the concerns. It was done in a collaborative fashion with a spirit of cooperation. That all came to an end on June 10, 1998 when the Jarbidge Bull Trout were listed on an emergency basis to stifle the Jarbidge Shovel Brigade. That was the end of the working group as far as I know and consequently the effort of the working group was wasted.

Others will address the South Canyon Road situation so I will limit my comments to effects on grazing. Listing under the Endangered Species Act opens up a whole new array of possible law suits and legal action. This past year we started to see

the radical extremist environmental groups begin to exploit the Act. We received a Notice of Intent to sue for grazing on our private lands. The notice says "your actions have caused and will foreseeably continue to cause the killing, harming, harassing, capturing and or other forms of 'take' of listed threatened Bull Trout". The charge is without merit, but when threatened, we must defend ourselves. The BLM and Forest Service also received notice of intent to sue which would force them to deny us water for our cattle which we have used for close to fifty (50) years. The extremist goal is to end grazing on federal land in the West and the Endangered Species Act has become the weapon of choice because it lends itself to harassment and opportunities for lawsuits.

We have and will continue to cooperate fully with the land management agencies to protect natural resources including Bull Trout. For example, the biological assessment for ongoing activity stated that spawning starts in September and since our cattle were present, that fish may be adversely affected. Our grazing permit has a season of use from July to October. We asked the Forest Service to modify our permit so we would remove cattle from the allotment by September 1 thereby limiting the possibility of conflict. They would not modify our permit, but did make the change in our annual operating plan.

The burden from redundant over regulation on ranchers speaks to the socio-economic impacts caused by the listing. We have been in compliance with the rules and regulations and are meeting the standards so this is not about protecting the fish. It is about abuse of process with the purposeful intent to damage private citizens.

The upper end of the Jarbidge River Watershed is wilderness. The lower is Wilderness study area, wild and scenic river and ACEC (area of critical environmental concern) for Big Horn sheep so it receives layer upon layer of restrictions and protection. The streams have been evaluated for PFC and are in properly functioning condition. In addition there are water quality standards set by DEQ (Department of Environmental Quality). For grazing, we also have to meet standards and guidelines as well as utilization levels on upland vegetation as well as riparian forage and shrubs.

To add the full weight of regulation provided for in the Endangered Species Act is overkill. Most troubling is the additional avenues of harassment it opens for radical environmentalists dedicated to ending livestock grazing in the West.

In conclusion, is the Jarbidge River population of Bull Trout truly threatened—probably not. Should it be delisted—most definitely. Should the act be amended to require peer review science and to prevent many of the abuses that the law currently allows, again—most definitely.

Thank you for allowing me to testify. Are there any questions?

Mr. GIBBONS. Mr. Brackett, I want to thank you again for coming all the way down to Elko to testify. You are from Rogerson, Idaho, and many of us as we listen to you understand now that the ESA, Endangered Species Act, is not just a problem here in Nevada but it is a problem universally around the West in particular. I do appreciate the fact that you have brought to us the stories of your family.

I'm being asked by the reporter here to take a little bit of a break so that he can rest his fingers. So when we come back, we'll ask a few questions, but we would like to take about a 10-minute break right now.

[recess.]

Mr. GIBBONS. This Resource Committee hearing will come back to order.

I'd like to begin now with a few questions for this panel of witnesses that I have. I'd like to begin with Mr. Brackett and ask him, because he's testifying as to the fact of threats, litigation, restrictions, and if you would elaborate for us: What have they forced you to do on your private property with regard to these restrictions and lawsuits?

Mr. BRACKETT. I think, you know—to preface my answer, you mentioned in your opening remarks, and it's been noted several

other times, the grazing wasn't a problem, grazing wasn't an issue in the listing. As far as our private land, we have continued to develop offstream water to restrict access on the riparian areas, implement better or more managed grazing systems, rotation deferred.

As far as what we are being forced to do, we don't know yet. We got the 60-day notice of intent to sue, and there hasn't been a follow-up on that.

Mr. GIBBONS. What group has given you notice to file suit?

Mr. BRACKETT. Western Watersheds and High Desert.

Mr. GIBBONS. These are environmental groups?

Mr. BRACKETT. They are.

Mr. GIBBONS. The issue of bull trout, obviously, there must be bull trout on your private property; is that correct?

Mr. BRACKETT. They are not on my private—well, no, they are not on my private property. They are adjacent on my brother's private property on Dave Creek.

Mr. GIBBONS. Your brother's ranch there on Dave Creek?

Mr. BRACKETT. We have some private property that is in the Dave Creek watershed that drains into Dave Creek.

Mr. GIBBONS. Does he graze cattle?

Mr. BRACKETT. He does.

Mr. GIBBONS. Does he graze cattle on the property that is in question with the bull trout?

Mr. BRACKETT. He does, and he has, and the family has for over 50 years.

Mr. GIBBONS. And yet, there is a substantial population of bull trout in the area?

Mr. BRACKETT. That's what the surveys show. That's what we're being told.

Mr. GIBBONS. So the conclusion would be that the grazing and population of the bull trout have minimal impact with each other?

Mr. BRACKETT. I think that would be a fair conclusion. Up until this time it's been compatible.

Mr. GIBBONS. I appreciate that.

Mr. Trafton, I certainly recognize the good work your organization has done with regard to building the bridge and the money you have contributed to the population of bull trout. Nevada Division of Wildlife has now found bull trout above the Jack Creek bridge that you worked on. And I think that's good. I think that's the kind of action that will help with regard to the bull trout.

I do have a second comment to make, and I don't know if any of the citizens here in the audience have read your written statement. I know I have. And I would only make one little recommendation about the attitude of the written words that are in there. They are not helpful to working together. They appear confrontational and caustic.

And I don't think that when you write a comment and put it in the record, Congressional Record, that your organization, and I don't believe that, unless that is your own personal opinion, is best suited by a very confrontational approach. And so I just don't think that it's in the best interests to come up with a very caustic written statement. It's not helpful in terms of being able to facilitate working together. A very confrontational attitude develops, and I would

just make that about your written testimony. Although it is going to be included in the record. I would just make that suggestion for you in the future when you do this.

I wanted to ask you a question. You have 130,000 members. In how many states?

Mr. TRAFTON. All 50.

Mr. GIBBONS. All 50 states. Is Trout Unlimited involved with the endangered Atlantic sturgeon in the Potomac River?

Mr. TRAFTON. We are not. They are not a trout.

Mr. GIBBONS. But it's a fish.

Mr. TRAFTON. It's a fish, yes.

Mr. GIBBONS. And you said that you were interested in all fish.

Mr. TRAFTON. I said we were interested in America's trout and salmon resources and their watersheds.

Mr. GIBBONS. If you look at this map up here, Mr. Trafton—and I don't know, you are not a biologist, I'm not a biologist, I'm a geologist—the canyon is 1500 feet wide, it's 1200 feet deep, and over the last hundred years, I don't know how many hundred thousand tons of soil have been washed down that canyon through the sediment in that stream. There was no road there, but it's a natural phenomena. Sediment deposition is not necessarily a road problem. Would you agree with that?

Mr. TRAFTON. I would.

Mr. GIBBONS. So it isn't necessarily the road being a problem up there.

Mr. TRAFTON. It's not necessarily the road being the problem, and I don't think we ever said that the road was the only problem that these fish face.

Mr. GIBBONS. I just wanted to make sure that you didn't list the problem as being the road because in your testimony it was the maintenance of the road that you indicated.

Mr. TRAFTON. If I may clarify on a couple points. I mentioned the road is a problem because in the letter that I received inviting me to this testimony, I was specifically asked to comment on what our involvement in the listing process has been, and our involvement has been specifically involved in the road. So that's why I concentrate some remarks on that aspect of the problems facing bull trout.

I should also say, just for the record, in reference to your suggestion that I be less caustic, personally I felt that my statement was probably not as caustic as some of the others that were given.

No. 2, just for the record for the people who don't necessarily know what the difference between my written statement and my oral statement was, it was a difference of about four words. So what I wrote and what I said were exactly the same thing, and there's no difference, and I think that's an important distinction for everyone to know.

Mr. GIBBONS. Well, it's how it's taken, and the four words can be significant in meaning. I just wanted to bring that to your attention.

Dr. Murphy, what's your opinion with regard to rarity as you heard Mr. Weller talk about as a cause or noncause for simply listing a species as endangered or threatened?

Mr. MURPHY. There's no question that rare species are in the forefront of listing decisions. There's also no question that our footprint on this earth is so substantial that all species rare and common are being impacted by them. I know that you have expressed interest in other circumstances regarding the expansion of weeds across the West, great scourge in the state of Nevada compromising our aquatic resources and so on. It may be that that ends up being the biggest threat to all species in the state of Nevada at one point or another, rare and common.

It certainly is appropriate for us to recognize that some species have exceedingly narrow distributions, and there is literally nothing we can do to expand those distributions. Glacial relics like this species includes a listed butterfly in Colorado which is found only above 13,000 feet on the northeast slopes of Mount Uncompahgre. That species is being squeezed off the top of the mountain by climate change, and we are likely to lose that species. The Service decided to list that species and this species, invoking not only the rarity but the specifics of perceived threats.

Mr. GIBBONS. Let me ask a clarification of your statement because you said multistate distributions. Is there not a multistate distribution for the bull trout?

Mr. MURPHY. Well, I try to be very careful. The Jarbidge bull trout is a Nevada species. The listing in the coterminous 48 states of a number of the DPS's or distinct population segments is of course a multistate challenge.

Mr. GIBBONS. Let me ask about the recovery, recovery plan for this. If the species habitat for the bull trout is principally, as you can see by the map up there, within a wilderness area that is very exclusive of most changes, I mean, it would be very difficult to change the habitat in that area by man, what recommendations would you have to improve a habitat that's in a wilderness area that is supposed to be untrammeled by man?

Mr. MURPHY. Well, as I pointed out in my written testimony, I'm afraid that we fall far short of where we would like to be in terms of an information base on this species. I'm not sure we know exactly what the needs are in terms of gravel size, large woody debris and all that goes with it.

It's very clear that a highly focused research agenda coupled with an adaptive management plan where we start to amend streams where necessary to respond to what we learn about this species and a much more rigorous monitoring scheme frankly than we have employed previously, could add up to pushing this animal to the extent that we can recover it. We can't look for the species to appear in the Independence Mountains and the Pequots. It is going to be a species in the Jarbidge Wilderness.

However, I think we can do things to secure this species. The only sad part of this process is I believe that the listing would have been unnecessary had the kind of cooperative ventures that have gone on elsewhere in this state been initiated before 1998, and this may be a model for how we don't want to deal with out incipient endangered species. I see no reason why a state this large with this much open space, this much Federal land has to suffer from Federal listings of species when stakeholders are so concerned about many of these species. Our capacity be able to put good science on

the ground is there, and the land that resource management agencies do have the tools to be able to protect these species.

Mr. GIBBONS. Let me ask if you would do this for the Committee based on your experience. Would you submit to us your suggested language change for science, how it should be applied to the listing of an endangered species?

Mr. MURPHY. I'll struggle with that job description.

Mr. GIBBONS. You understand what we're trying to get at? You actually said that it should be science. Science is very vague in many cases and how it should be applied and what we understand.

Mr. MURPHY. I think we're experiencing here, in deference to both Trout Unlimited and Mr. Weller, that it's not just using the best available science but it's finding a way to interpret parsimoniously that information. Laying those data on the table aren't enough.

Mr. GIBBONS. That is why I'm asking how the science is to be interpreted. In other words, how is it applied and what science is needed. I think we have to be very specific because being vague in general has led us down this path to where now sometimes we see abuses in some cases.

Mr. MURPHY. Those of us who struggled with the Endangered Species Act believe the Congress left this area specifically vague so that there would be alternatives offered up to the agencies in invoking this statute. But as you pointed out earlier, small butterflies stopping landowners from carrying out otherwise lawful activities probably were not in the minds of the signatories who handed the legislation Christmas eve to President Nixon.

Mr. GIBBONS. Having read the Committee reports in 1973 on this issue, I can say that their idea was not the application of the endangered species as we see it today. It was to save the grizzly, it was to save the bald eagle and other larger species, not down to the endangered Steamboat buckwheat grass blade, or a small butterfly in some other area.

Mr. MURPHY. Those are the exact words of Senator Goldwater in 1974.

Mr. GIBBONS. Well, that was 1 year after it was enacted. So I can tell you, I wasn't there, but I have read them. And I agree with you on that.

One final question, Dr. Murphy, and that would be: Do you know any organization, whether private or public, that has studied the bull trout in this area to the degree and depth that the Nevada Department of Wildlife has?

Mr. MURPHY. I can't answer that because I haven't seen the full record that the Fish and Wildlife Service reviewed in its listing package, but there is no question that the strongest presentation of data was that by NDOW in its sequence of three reports from 1990 to 1999. Now with that I'd like to add a caveat that one of the biggest shortcomings in the Endangered Species Act implementation that we have is the application of data in recovery processes, in deciding the fate of private lands under HCP's, and it's a lack of reliable data that often compromise us. The problem with the data set is not that there aren't data, but that the data have not been collected in experimental framework that allows the strongest possible conclusions of all sorts to be drawn from it, No. 1.

And No. 2, we really lack a long time series. And you remember part of the argument here is not just how many trout but whether they are trending down or frankly whether they are trending up. And we just simply can't draw those conclusions from the current data base.

Mr. GIBBONS. Well, that's one of the problems with the listing actually because you don't have the population trends in the listing aspect, let alone the delisting, and that has led us to this point as well.

Let me go talk to Mr. Weller and ask him a question. When did the State of Nevada begin, and you said you have actually done some of the studies and work in this area on the bull trout, when did the State of Nevada begin looking at this fish?

Mr. WELLER. Well, we have anecdotal records from clear back in the early 50's shortly after the then Department of Fish and Game was created. And we did that in conjunction with normal biological monitoring in the area. So we do have some. And I agree, there is not a lot of rigor in that data, but there is data from clear back as early as 1954.

Mr. GIBBONS. Have population trends been part of that data?

Mr. WELLER. Again, I would agree with Dennis, there is—as a management agency, we are bound by what we are able to do. We do not do research rigorous type investigations. We do management type investigations.

And his point is well taken. The amount or the integrity of that data could come under question because it is not done to exacting statistical levels. But it is adequate for management, and that is what we do.

To continue, I guess I would say that we have had that anecdotal information and data that we have gathered clear back into the 50's, but we realize that there was an issue coming here in the mid '80's and started an intensive look at the fish and used that look that culminated in the report of 1994 to summarize, to try to encapsulate that trend based on old. We, for instance, went back to old sites where we had contacted fish in the 50's and re-replicated those surveys. And that sort of thing from a management standpoint, our intent was to determine in fact are we in fact on a downward trend in this fish. We didn't see that.

I would say also as we gotten deeper embroiled in this whole process, we have refined our methods significantly, going to the literature, going to research to find better ways of looking for fish, more intensively and extending, for instance, our sample, the intervals, the intensity of our work to try to improve that. As we have done that over the years, over the last several years, we have been able to actually confirm our data and enlarge our estimates and gain more comfort with our estimates.

Mr. GIBBONS. Would you believe or would you agree that probably some status of a species, either prethreatened or preendangered that would permit a recognition of the need to study something would be a better way to force a scientific evaluation over a period of time rather than jumping head long into the listing of it as threatened and saying, well, we don't have the data but we'll leave it on the sidelines? What I'm saying is we need to look at the science before we list and make some sort of a recommenda-

tion to a species that is entitled to looking at science and data before we go forward with the process of listing it. That would be my question.

Mr. WELLER. Quite frankly, Congressman, that is exactly what we tried to do. We saw this on the horizon. We saw it was coming. West wide in the basin we knew we had the southern most distribution of bull trout, and we knew there were going to be under a lot of scrutiny. So we tried to establish that prior to that. We did collect data. And we did present that data to the Service, and we feel it was not—it was ignored.

Mr. GIBBONS. Let me ask a question. Does the Endangered Species Act itself listing, current listing, restrict, inhibit or otherwise obstruct any of the data collection and studying that you would do, normally do?

Mr. WELLER. As we have described earlier, when a species becomes listed, you step into a joint jurisdictional role for that species. Prior to that we had sole jurisdiction as the State of Nevada. Fish belonged to the people of the State of Nevada, we're that agency by law required to manage them. As the fish is listed we step into a joint jurisdictional role. We still have a role, but so does the Service.

And now we fall under the auspices of the Endangered Species Act, and we have section 10 take requirements. We have section 7 consultation requirements. We have the potential funding sometimes of section 6 funding we can pull into that.

So there are those issues that come into effect very definitely. All of a sudden we're—and quite frankly, we're answering to a new schoolmaster here.

Mr. GIBBONS. Well, where is your agency currently at with regard to the bull trout management plan?

Mr. WELLER. The Division of Wildlife developed a management plan, it's been referenced a few times, back in 1990. The plan was never truly gone through. It had never truly gone through a formal process, but we have that plan in place. The plan is currently in a state of revision bringing it up to date with our current knowledge base.

But we realized in 1990 we had to have some—and what the species management plan does for us is give us a working document. It's our document as to what, how we value the fish, where we're going with it. And so that plan has been in existence all along. And I would say that the majority of work that we have done on the bull trout since the whole issue began is tied directly to that management plan.

Mr. GIBBONS. If I look at the southern exposure, the southern distribution of the bull trout, and the types of environment and habitat for the bull trout, is there any way to expand the area of the habitat and guarantee us or at least provide us with an assurance that we will expand the population? In other words, if the habitat area is the restricting part of the limited numbers of bull trout in the area, obviously, you are going to need to expand the habitat.

Can you physically theoretically expand the bull trout habitat in this area to eliminate that one restriction?

Mr. WELLER. Again, we're back to the issue of nodal versus focal habitats. The critical habitat for bull trout are the focal habitats. Those are those habitats that are required for reproduction and rearing.

The lower focal type or nodal type habitats lower down in the drainage, the majority of it are critical. I'm not demeaning them at all. They are very important.

And there is a role of the population. The population needs those nodal habitats as well as the focal ones. However, they are not the critical habitats that are going to cause the demise of the fish.

To answer your question, I believe that there's very little opportunity to enlarge focal habitats. Those in the dark blue on the map are areas that are very very exacting. The fish is a glacial relic, requires cold water, requires certain slopes, requires complexity of habitat. Those areas are there, they are established, and they are occupied.

And so I would say there is very little opportunity to increase focal habitats. Nodal habitats, there are some issues. We could deal with road issues down below. And we could do some better work in best management practices, et cetera, that could help those nodal habitats. And I would recommend that we do do that.

But my issue becomes the threats. There are no threats to the primary areas where they need to be. So we really don't have opportunities there.

Mr. GIBBONS. You indicated that there was no serious species competition within the stream itself.

Mr. WELLER. That's correct.

Mr. GIBBONS. So unfortunately, Judge Jones in Oregon didn't think so. He felt that there was some competition of species there as well. I'm not sure where that science came from. Maybe he was a fisherman. I can only guess. Maybe he visited the area.

Mr. WELLER. I wouldn't discount that there is no competition of fish species in the river. But they are all evolved. They are natural species. Those are the fish that have been there all along, and the bull trout have persisted in spite of that competition. Bull trout are tough little fish. They do OK by themselves.

Mr. GIBBONS. Let me ask the same question I asked Professor Murphy, if you wouldn't mind putting together a recommendation of how the law should apply the science to the listing of an endangered species and provide that to me, I would appreciate that.

Mr. WELLER. I can do that.

Mr. GIBBONS. I know it is a challenge.

Mr. WELLER. Very definitely.

Mr. GIBBONS. It is a big case. I would imagine stochastic events up there in the focal habitat area are probably, as you say, the biggest threat to the survival of this species, much of which we can't control. If you had an enormous fire up there that denuded the surface, erosion would run down, choke the stream with sediment, and you could have a terrible disaster on the species. Those types of situations are beyond the control of human beings. We have no means by which we can forecast nor prevent something like that.

As you heard, the county is having a difficult time, as well as others, in the fire fighting and preparation, prevention as well as fire fighting, actual fire fighting capability in the area. I'm very

concerned that some of the byproduct of listing is actually more detrimental to the future of a species in terms of restricting our ability to thin forest or to prevent forest fires, thereby causing more damage than we would be preventing it.

Mr. WELLER. I think your point that you made earlier was very well taken. I had the opportunity with my family to visit Mount Saint Helens this last year, and I would point out that the seven peaks of the Jarbidge are volcanic peaks. Indeed, there is volcanic activity there. When I looked at Mount Saint Helens, I realized what a stochastic event indeed is. Or meteor, as you mentioned, were to happen, it all becomes a moot point.

So we live under that threat. There is always that fear that that could happen.

If you look at the map, you see a distribution in two major drainages, and these two drainages are separated by some pretty rugged country. There is no question a good fire could break out at the top and sweep the whole thing, or one of the seven peaks could erupt and take the whole thing out. That could happen.

But what we have to depend on, I believe, as we have looked at this, is the fact that there are—they are individual populations spread throughout those two drainages. If indeed a fire were to ravage, heaven forbid, the west fork of the Jarbidge, we have the metapopulation potential where fish from the east fork could recolonize the west fork. We could do that if it got to that.

I also have discovered over the years—.

Mr. GIBBONS. Could you do that under the Endangered Species Act?

Mr. WELLER. It would be a challenge. We would have to do a lot of consultation, but I think it can be done in the spirit of cooperation, as mentioned.

But I was going to say, with my number of years in fisheries biology, I have been taken back a number of times at the resiliency and the strength of fish populations. Fish survive fires. They are not totally gutted by a fire. I have seen them do it a number of times. Something like a bull trout in a high drainage protected by rock could very well survive a fire. And their population numbers respond very rapidly in proper conditions.

The other thing I have noticed is the quick response of vegetation after fires.

So I would say don't discount the fact that just the natural process will take care of itself. There is no doubt there have been fires in the Jarbidge in the past, major fires in the past, and the fish has persisted, and I would say that we shouldn't underestimate that ability of the fish to do that.

So I would add those two things. We have the ability to respond because we are here. The systems are well protected, the populations are diverse and spread, and I'm not going to say it couldn't happen, but it's not the big fear that we would think, I don't think.

Mr. GIBBONS. Well, I wanted to thank all of you for your very enlightened testimony. It's certainly very helpful, very valuable to this Committee because our challenge is great. Our challenge is to come up how to make the ESA work before the Endangered Species Act destroys itself through misapplication or through abuse or through inability to move forward as sometimes is the case.

Many times we have got species out there that are listed with just a label on them, and nothing is happening, no plans, there's no work being done, no studies being undertaken, and simply listing a species as endangered or threatened doesn't by itself save the species. I think that's the important part that we all have to look at.

Trout Unlimited has done a great thing in building a bridge to help the species get to the focal areas. That's very important.

But it is actions rather than words, and more so it's being able to work together on something like this rather than threaten lawsuits and bring everybody to a standstill while we spend valuable resources, valuable money, and oftentimes bankrupting people, in an effort to do something that I think collaboration and working ahead of time would have prevented and worked well with.

I'm not going to ask any more questions. I did want to say as we close here, to everybody here, the purpose of this meeting was to bring out the Endangered Species Act in terms of an educational aspect to allow you to see how it's applied, some of the misinformation that is out there, and to learn a little bit more about it. It's also to have this Committee understand from the testimony of these people and other witnesses that have been here a better understanding of how to move the Endangered Species Act itself into a position that is intended to do what it is supposed to do and that is to help recover species, and we certainly want to do that.

This brings us to the end of our hearing, and I did want to once again thank everybody, especially the audience who has sat through this very patiently for 3 hours as if it were a college course, and I hope you have gained as much as I have from this hearing.

And with that, I want to thank each and every one of our witnesses today as well for their participation and bring this hearing to a close. Thank you, gentlemen.

[Applause.]

[Whereupon, at 3:56 p.m., the Committee was adjourned.]

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