

**MINUTES OF THE
SENATE COMMITTEE ON NATURAL RESOURCES**

**Seventy-Seventh Session
April 9, 2013**

The Senate Committee on Natural Resources was called to order by Chair Aaron D. Ford at 1:07 p.m. on Tuesday, April 9, 2013, in Room 1214 of the Legislative Building, Carson City, Nevada. The meeting was videoconferenced to Room 4412E of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. [Exhibit A](#) is the Agenda. [Exhibit B](#) is the Attendance Roster. All exhibits are available and on file in the Research Library of the Legislative Counsel Bureau.

COMMITTEE MEMBERS PRESENT:

Senator Aaron D. Ford, Chair
Senator Mark A. Manendo, Vice Chair
Senator Tick Segerblom
Senator James A. Settelmeyer
Senator Pete Goicoechea

GUEST LEGISLATORS PRESENT:

Senator Justin C. Jones, Senatorial District No. 9
Senator Ben Kieckhefer, Senatorial District No. 16
Assemblyman John C. Ellison, Assembly District No. 33

STAFF MEMBERS PRESENT:

Michael J. Stewart, Policy Analyst
Brenda Erdoes, Counsel
Patricia Devereux, Committee Secretary

OTHERS PRESENT:

Jack Robb, Chair, Board of Wildlife Commissioners, Department of Wildlife
Jeremy Drew, Vice Chair, Board of Wildlife Commissioners, Department of Wildlife
Jim R. Barbee, Director, State Department of Agriculture
Jason King, P.E., State Engineer, Office of the State Engineer, Division of Water Resources, State Department of Conservation and Natural Resources

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Alfredo Alonso, Alliance of Automobile Manufacturers
Michael D. Hillerby, Honda Motor Company, Limited
John M. Cabaniss, Jr., Director, Environment and Energy, Global Automakers Association
Jack Stanko, President and Owner, Champion Chevrolet
Kyle Davis, Political and Policy Director, Nevada Conservation League & Education Fund
Sean T. Higgins, Afton Chemical Corporation; Biodiesel of Las Vegas, Incorporated
Peter Krueger, State Executive, Nevada Petroleum Marketers and Convenience Store Association
Lawrence Waugh
Rob Buonamici, Chief Game Warden, Division of Law Enforcement, Department of Wildlife
Beverlee McGrath, American Society for the Prevention of Cruelty to Animals; Best Friends Animal Society; Nevada Humane Society; Northern Nevada Society for the Prevention of Cruelty to Animals; Nevada Political Action for Animals; Lake Tahoe Humane Society and Society for the Prevention of Cruelty to Animals; Compassion Charity for Animals; Pet Network of Lake Tahoe; Wylie Animal Rescue Foundation; PawPac; Lake Tahoe Wolf Rescue
Oscar Peralta, Nevada Hispanic Legislative Caucus
Jeff van Ee
Marjorie Sill
Joseph Johnson, Toiyabe Chapter, Sierra Club
Jerome Walker, Charter Post Exploration LLC
Paul J. Enos, Noble Energy, Incorporated
John P. Sande III, Western States Petroleum Association
Alan R. Coyner, Administrator, Division of Minerals, Commission on Mineral Resources
Michael Visher, Deputy Administrator, Division of Minerals, Commission on Mineral Resources
Colleen Cripps, Ph.D., Administrator, Division of Environmental Protection, State Department of Conservation and Natural Resources
William J. Ehni, Ehni Enterprises, Incorporated
John Snow, Commission on Mineral Resources
David C. Fitch, C.P.G.
Randy Henkle, Henkle and Associates

Wayne Seidel, Administrator, Motor Carrier Division, Department of Motor Vehicles

Chair Ford:

We will hear a presentation from the Board of Wildlife Commissioners.

Jack Robb (Chair, Board of Wildlife Commissioners, Department of Wildlife):

Since the last time we testified before the Committee, we have had a Wildlife Board Legislative Committee (Legislative Committee) meeting and a Wildlife Board meeting about the bills concerning the Wildlife Board that have been and will be heard by the Legislature. The Wildlife Board has taken a formal position on the bills, so we will no longer be speaking in a neutral position, unless that is the official position we adopted.

Jeremy Drew (Vice Chair, Board of Wildlife Commissioners, Department of Wildlife):

You have a copy of my legislative update ([Exhibit C](#)). Each bill was first reviewed by the Legislative Committee in conjunction with the bills the Department of Wildlife (NDOW) is tracking, including input from its policy experts. The Legislative Committee provided recommendations to the Wildlife Board, which voted to uphold or alter them. The Wildlife Board then may address additional legislation not considered by the Legislative Committee.

Chris MacKenzie is past chair of the Legislative Committee, and I am its vice chair. Michael McBeath, Bill Young, Tina Nappe and Kyle Davis are the other members. I furnished the votes of the Legislative Committee and the Board of Wildlife Commissioners on each bill in my presentation in [Exhibit C](#).

Senate Bill (S.B.) 132 involves the issuance of 365-day hunting licenses.

SENATE BILL 132: Revises the period of validity of hunting and fishing licenses.
(BDR 45-783)

The Legislative Committee and the Wildlife Board voted to oppose the bill as introduced, or if it is amended, to apply to fishing licenses. Our opposition was primarily due to its large fiscal note and the fact that sports enthusiasts are comfortable with the current licensing process.

We opposed S.B. 134, which concerns guzzlers, as introduced. However, we changed our position to support the Committee's vote of amend and do pass.

SENATE BILL 134: Revises provisions governing animals. (BDR 48-249)

We supported the Committee's vote to pass S.B. 181.

SENATE BILL 181: Revises provisions relating to fishing. (BDR 45-178)

Senate Bill 248 involves abandoned vessels. We opposed it as introduced primarily due to concerns expressed by the NDOW on April 2.

SENATE BILL 248: Allows a person who discovers an abandoned vessel on private property to apply for a certificate of ownership to the abandoned vessel under certain circumstances. (BDR 43-997)

Senate Bill 245 involves the private possession of dangerous wild animals.

SENATE BILL 245: Enacts provisions relating to the importation, possession, sale, transfer and breeding of dangerous wild animals. (BDR 50-161)

We support the bill's principle, with two possible amendments. We would add "gray wolf" to the list of species to provisions similar to those covering mountain lions. It would read, "that have been bred in captivity, including hybrids, thereof." We were concerned because mountain lions and gray wolves potentially could be animals in the State we would not want to put in the *Nevada Revised Statutes* (NRS) or the *Nevada Administrative Code* (NAC). We would like the bill to distinguish those animals bred in captivity versus wild animals. Another amendment would exempt the Zoological Association of America from the requirements of the bill.

Senate Bill 333 deals with antelope and mule deer compensation tags, the elk compensation-tag program and preserves for big-game animals.

SENATE BILL 333: Revises provisions relating to wildlife. (BDR 45-1026)

The Legislative Committee voted to oppose all three aspects of the bill, primarily because of the preserves provisions after the tag provisions had been amended

out. We had concerns about the potential for high-fence hunting, escaped animals or disease interactions with wild species.

Senate Bill 371 deals with the feeding of wildlife and is part of today's work session.

SENATE BILL 371: Prohibits a person from intentionally feeding any species of wildlife other than a wild bird. (BDR 45-838)

We supported the bill with the proposed amendments of its sponsor, Senator Ben Kieckhefer, Senatorial District No. 16, which made the bill specific to big-game mammals and coyotes. The NDOW has also worked on the bill with Senator Kieckhefer.

Senate Bill 434 deals with stolen-boat processing and accident-reporting thresholds.

SENATE BILL 434: Revises provisions relating to vessels. (BDR 43-1002)

We supported the bill as passed out of the Committee.

We opposed S.B. 213 as introduced, but the Legislative Committee has been informed there could be possible amendments.

SENATE BILL 213: Revises certain provisions relating to the trapping of wild animals. (BDR 45-450)

Without that new language, we continue to oppose the bill as introduced. We hope to review it again as amended.

Senate Bill 184 deals with the composition of the Board of Wildlife Commissioners.

SENATE BILL 184: Revises provisions governing the membership of the Board of Wildlife Commissioners (BDR 45-408)

The Legislative Committee and the Wildlife Board were unanimously opposed to the bill as written. A proposal was made at the April 5 Wildlife Board meeting to

replace one of the license-holder seats with a second general public seat. However, for lack of a motion, we did not change our position on the bill.

Senate Bill 82 would prohibit the Board of Wildlife from authorizing black bear hunts and classify them as protected mammals.

SENATE BILL 82: Prohibits the Board of Wildlife Commissioners from authorizing the hunting of black bears. (BDR 45-409)

We opposed the bill as introduced. The NDOW did a presentation on the State's bear population at the Legislative Committee's March 7 meeting. They discussed whether the Wildlife Board could reclassify bears as protected under the NAC. It was determined the Wildlife Board could do that, but the NDOW did not believe the biological criteria were met. However, the NDOW indicated that if the Wildlife Board wanted to make an exception for social considerations, that would be within its purview.

Chief Game Warden Rob Buonamici, Division of Law Enforcement, NDOW, provided us with some possible legal ramifications of the bill. He showed us that a reclassification could potentially result in the loss of enhanced penalties for the poaching of big-game animals, as defined in NRS 501. [Exhibit C](#) contains copies of Warden Buonamici's analyses.

Chair Ford:

We will open the hearing on S.B. 464.

SENATE BILL 464: Renames the State Sealer of Weights and Measures and the Division of Measurement Standards within the State Department of Agriculture. (BDR 50-1148)

Jim R. Barbee (Director, State Department of Agriculture):

Senate Bill 464 is part of the reorganization of the State Department of Agriculture (NDA). We seek to change the name of the Division of Measurement Standards, NDA, to "Consumer Equitability." That name would clarify what the division does for the public, Legislators and all concerned. It inspects all commercial scales, inspects gasoline and fuel pumps to make certain their volume is accurate and tests grocery scanners for accuracy. Based on changes in the measurement standards industry, "Consumer Equitability" is more appropriate and descriptive of the division's duties.

Chair Ford:

We will close the hearing on S.B. 464 and open the hearing on S.B. 341.

SENATE BILL 341: Revises provisions governing the transfer of water rights.
(BDR 48-543)

Senator Pete Goicoechea (Senatorial District No. 19):

Senate Bill 341 was brought forward at the request of former State Senator Dean A. Rhoads. The issue in the bill has been heard in court at least three times. The bill's intent is to clarify what criteria the state engineer needs when conveying water rights.

Assemblyman John C. Ellison (Assembly District No. 33):

Senate Bill 341 relates to conveyance and deeds of an application to permit appropriation of water, certificates of appropriations, adjudicated and unadjudicated water rights and applications to permit changes to parts of the Division of Water Resources, Office of the State Engineer, State Department of Conservation and Natural Resources (DCNR).

Conveyances are acceptable tools used by the state engineer to determine if a conflict exists in changes of titles and to help him or her make other determinations related to water rights. By law, each conveyance must be made by deed and then notarized and recorded with respective counties. Section 1, subsection 2 of S.B. 341 would provide, "For the purpose of NRS 533.386, the State Engineer shall consider any conveyance or purported conveyance which does not meet the requirements of [section 1,] subsection 1 to be void." Additionally, if a conveyance is not properly deeded, notarized or recorded by the respective county recorder, as per section 2 of the bill, it shall also be considered void by the state engineer for the purposes of NRS 533.386.

For some perspective on why S.B. 341 is important, NRS 533.386, section 1 sets forth the state engineer's duties concerning conveying deeds. He or she must confirm reports of conveyance are properly completed, all fees are paid to the Office of the State Engineer, the rate of water diversion and amount of water conveyed are accurate and that no conflict exists on the chain of title on the water. The NRS simply states if the conveyance is improperly deeded, notarized and recorded or if a deed is improperly recorded, the state engineer must deem that conveyance or deed void for the purposes of NRS 533.386. Under section 3, subsection 5 of the bill, it is proposed that the state engineer

shall not consider any voided conveyance or deed in determining whether the conflict exists in the chain of title.

When a conveyance is not properly notarized and filed in a county, the procedures set forth in NRS 533.386 can essentially be compromised. The title change can be clouded if confused, and the change of title must then be handled by the courts. That is why we must allow the state engineer to deem conveyances void if the procedures are not followed. Senate Bill 341 could streamline the conveyance process and at least allow the state engineer to better control the documents he or she needs to comply with the NRS.

Senator Goicoechea:

What the bill is trying to clarify is that some water titles have been conveyed erroneously without the right documentation. The bill essentially says it will be illegal for the state engineer to convey ownership of water rights without those documents and a clear chain of title. The bill's language reaches back to conveyances that occurred as long ago as 100 years, especially vested ones for which chain of title is still trying to be established. Changes were made to NRS 533 in 1995 and 2005, and I am concerned legislation might impact conveyances like the case, heard in the 1940s, that those changes addressed.

Jason King, P.E. (State Engineer, Office of the State Engineer, Division of Water Resources, State Department of Conservation and Natural Resources):

You have a copy of my written testimony ([Exhibit D](#)). Our office opposes S.B. 341 because we believe that what it is proposing is already in statute and is what we have been doing since 1995.

Nevada Revised Statute 533.382 was adopted in 1995 and provides that every conveyance of an application, permit, certificate, adjudicated or unadjudicated water right or an application or a permit to change that right be made by deed, notarized in the manner required by law and recorded in the county in which the water is used. In 2005, a legislative declaration was adopted declaring:

It is the policy of this State that...confirming a report of conveyance are not intended to have the effect of quieting title or changing ownership of a water right and that only a court of competent jurisdiction has the power to determine conflicting claims to ownership of a water right.

In 1995, my office was told to transfer titles through the review of recorded deeds. In 2005, it was determined that our office's decisions are not controlling. If we make a mistake in a title, the aggrieved party can take the issue to a "court of competent jurisdiction" to quiet and change the title. We believe the concern raised in the bill is addressed in statute, which does not need to be changed.

Senator Goicoechea:

I agree this was confirmed in the 1995 changes. In 2005, the state engineer made an error in transferring a water right from a spring for which I had a deed. I told the office the error had been made, and it was corrected. The application of the person who had applied for the water rights of my spring was rejected.

Existing NRS does work, but we are trying to fix some pre-1995 water rights cases. The state engineer and I are concerned that if we try to put something in the NRS stating that any conveyance after the 1995 and 2005 strictures is questionable, it will really muddy the water. I am trying to get the legislative hearing in place today by saying, "Hey, we understand this is the only way the state engineer can convey title to water. We understand there are past instances when errors have occurred, but the only way we can currently fix them is in a court of competent jurisdiction."

Chair Ford:

I will close the hearing on S.B. 341 and open the hearing on S.B. 468.

SENATE BILL 468: Revises certain fees collected by the State Engineer.
(BDR 48-1155)

Mr. King:

You have a copy of my written testimony ([Exhibit E](#)). The Office of the State Engineer requested S.B. 468 so we can raise our fees to cover the actual costs of our services better and allow the office to retain those fees. The Committee needs to understand what our initiative is for the Division of Water Resources for the next biennium and future biennia.

Historically, our office has been funded almost entirely by the General Fund. For various services, we assess about 40 fees, which are deposited in the General Fund. Every 2 years, we must request funding from that Fund. Over the years, the Water Resources Division's budget has been dependent upon the health of

the economy. More than 95 percent of our budget goes to salaries, supplies and rent. It fluctuates with the economy, and this is not the best way to fund the Water Resources Division in the driest state in the Nation.

The Executive Branch supports our proposal to move away from being almost entirely dependent on the General Fund to a mix of fee retention and General Fund accounts. The bill is the first step in a process to transition the Water Resources Division to increased levels of non-General Fund support.

We view this initiative as an investment in the future management of water in Nevada and the bill as integral to making that happen. The additional revenue would be used to stabilize staffing levels and shore up some programs, such as adjudications. Our proposed 2014-2015 budget includes a request for five critical adjudication staff: three engineers, two engineering technicians and associated trucks and field equipment. Without the bill, those positions cannot be created.

Senate Bill 468 proposes to increase incrementally almost all of our existing base fees by approximately 20 percent. A detailed analysis of those fees clearly shows our current fee structure does not come close to covering the actual cost of performing needed services. We do not want our payees to bear that 20 percent increase, at least initially. Four new fees are proposed for services for which we currently do not charge. We are proposing to employ the beneficiary-pays principle, in which people receiving the benefit of our services will pay an increased share of their cost, instead of the State subsidizing them. Senate Bill 468 also proposes that the Water Resources Division retain its fee revenue and receive less General Fund support.

By "having all of our eggs in one basket," i.e., the General Fund, our staffing levels and program support will continue to fluctuate as does the State's economy. A fee-funded agency will help stabilize fluctuating staffing levels.

Chair Ford:

You mentioned a 20 percent fee increase. How did you arrive at that figure?

Mr. King:

We came up with that figure after discussing fee increases with DCNR Director, Leo M. Drozdoff.

Senator Settlemeyer:

There was another fee increase during a tough economic period. How much was that increase? One of the most important aspects of water is the ability to utilize it. If you cannot use or transfer water, its value is immaterial.

Mr. King:

The last increase was in 2009, and the one before that was in 1989. The 2009 increase was not across the board, like S.B. 468 proposes to do. I do not remember what the increase was then.

Senator Settlemeyer:

Will the increase provide additional funds so you can hire more staff and process paperwork more quickly, or would the bill just make the Water Resources Division more fee-based?

Mr. King:

The fee increase will be used to hire more staff. Built into our budget is the authorization to retain an anticipated surplus after a couple of biennia that we could use to hire more staff. The increased fee would be used to shore up other sections of the Water Resources Division.

Senator Goicoechea:

Is the fee increase to be used to hire five staff, including three adjudicators? I will vote for the bill, because if we do not start adjudicating some water basins, we will get nowhere.

Chair Ford:

We will close the hearing on S.B. 468 and open the meeting on S.B. 433.

SENATE BILL 433: Revises provisions governing motor vehicle fuel.
(BDR 51-1101)

Alfredo Alonso (Alliance of Automobile Manufacturers):

You have a letter from the Alliance of Automobile Manufacturers and the Global Automakers Association and a letter from the Natural Resources Defense Council ([Exhibit F](#)) in support of S.B. 433. We have discussed the issues in S.B. 433 for quite a while with the State Board of Agriculture, NDA. Nevada banned the use of methylcyclopentadienyl manganese tricarbonyl (MMT) in late 2009 or early 2010. A manufacturer of MMT approached the Board of

Agriculture and convinced its members that they could get more affordable gasoline for the State through Utah. The manufacturer had a study that claimed residents would have a 3-cent to 5-cent reduction in the price per gallon of gas. When the proponents were asked if that savings would be at the pump, the answer was unclear. This demonstrates why gas with MMT is being brought into the State, which has very little to do with consumer savings.

Some studies show that the use of MMT does not affect vehicles. Other studies show that MMT does not affect human health and is a safe octane booster. On the contrary, the use of MMT affects all of our vehicles. You have a list ([Exhibit G](#)) of sample vehicle owner's manual language concerning MMT. Under their driving and operability chapters, most of the manuals contained something to the effect that:

Some gasolines that are not reformulated for low emissions can contain an octane-enhancing additive called 'MMT.' Do not use gasolines with MMT as they can reduce spark plug life, affect emission-control system performance, and the malfunction-indicator lamp may turn on. If this occurs, see your dealer for service.

Emission systems malfunction, and then dealers will have to explain to vehicle owners that it was caused by the gas they used. This is a simple issue. The use of MMT harms vehicles and consumers, and, ultimately, it is good public policy to reinstate the ban upon it.

California bans MMT. The gas we get from there is mostly reformulated and does not contain MMT. You cannot add MMT to reformulated gas. Washoe and Clark Counties use ethanol to which you cannot add MMT. You have an unregulated fuel that is not tested by the Board of Agriculture. No one knows where that gas is going or if they are putting MMT into their gas tanks, even if they heed manufacturers' warnings. If you live in a rural Nevada county, you do not know if MMT is in your gas.

As far as the study that indicated there would be some gas-price relief with MMT, today's <http://www.fueleconomy.gov> survey indicates that Nevada's rural counties have the highest gas prices in the State. Why do we allow MMT into the State? Manufacturers of MMT tell us it does not harm our vehicles, but I would rely on the experts.

Chair Ford:

The use of MMT was banned then allowed back into the State in 2011 by the NDA. If that is a big problem, why would the NDA reauthorize its use?

Mr. Alonso:

I was at some of the NDA meetings. The reauthorization had very little to do with safety or consumers. The discussion had to do with the potential of bringing in cheaper gas. Science was not a factor, and there was no detailed discussion of consumers going to dealers with MMT-caused malfunctions. It was all about gas prices.

Chair Ford:

Why was MMT banned?

Mr. Alonso:

We do not know when the ban took effect. In the 1990s, Afton Chemical Corporation asked the U.S. Environmental Protection Agency (EPA) for a waiver to produce MMT. It is not illegal in the Nation; it is just allowed. The lawsuit that engendered S.B. 433 involved health effects, and the EPA lost that suit. The suit had little to do with the gas itself.

Chair Ford:

Did the EPA sue over the use of MMT, claiming adverse health effects? Did it lose the case?

Mr. Alonso:

Yes.

Michael D. Hillerby (Honda Motor Company, Limited):

Honda Motor Company, Limited is part of the Global Automakers Association. In 1994, the Afton Chemical Corporation petitioned the EPA under a section of the Clean Air Act of 1963 ([Exhibit H](#)) that deals with emission controls to approve MMT as an additive. The EPA said it had met its emissions-control burden, but a lengthy 1994 *Federal Register* filing outlined the potential health effects of MMT.

You have an information packet ([Exhibit I](#)) from the International Council on Clean Transportation outlining studies on the health risks of manganese fuel

additives. [Exhibit I](#) includes two letters in support for S.B. 433 based on those risks. Manganese becomes an oxide when it is combusted at high temperatures. It is emitted from vehicles as a particulate that lodges in the lungs. Manganese oxide is a unique neurotoxin that can pass through the blood-brain barrier. Once it is burned, one form of manganese oxide can go directly through that barrier. The other form needs a protein carrier. The EPA determined that manganese oxide is a neurotoxin. You have a handout ([Exhibit J](#)), titled "Effect of Organometallic Fuel Additives on Nanoparticle Emissions from a Gasoline Passenger Car."

Afton sued the EPA, saying the EPA was limited to granting the waiver solely on the issue of emissions control, not on health issues. That is not what Afton asked the EPA to consider in its application for the waiver. You have a copy of the July 17, 1995, Federal Register ruling ([Exhibit K](#)). The EPA repeated its health concerns and said a judge had ordered it to grant the waiver. That is hardly a glowing recommendation of MMT, with the health concerns still listed in the ruling.

At a hearing about a month ago in front of the NDA, the EPA said it could only find evidence that MMT was possibly being used in two states. It may be in 1 percent of the Nation's fuel. The reason its use is so restricted is the EPA bans its use in reformulated or regular gas containing ethanol. That is about 30 percent of the U.S. market. That is why the bill seeks a warning to consumers about the presence of MMT, if not an outright ban.

Chair Ford:

The Afton lawsuit did not contest the allegations about health risks. Was the suit about the EPA exceeding its scope in trying to decide if MMT could be used? Did the ultimate court ruling just address the EPA's scope of responsibility or authority?

John M. Cabaniss, Jr. (Director, Environment and Energy, Global Automakers Association):

I worked at the EPA from 1980 to 1995. The court looked at the Clean Air Act of 1963 to ascertain if the EPA needed to base its determination of Afton's waiver request on the Act's stipulations. The health issues were beyond the scope of that determination, and that is why the court ordered the EPA to reconsider and grant the waiver.

You have an information packet ([Exhibit L](#)) that details MMT's effect on engines. When a metallic fuel additive like manganese is combusted, deposits form. All of the engine components affected by the combustion process are coated with deposits. The cylinders, engine valves, spark plugs, oxygen sensors that regulate the air-fuel mixture and catalytic converters are coated with fine dust. Catalytic converters have a fine mesh of 800 to 1,000 grids per inch resembling a filter. After 30,000 to 40,000 miles, the catalysts will become clogged. In today's vehicles, spark plug life is generally 100,000 miles or more. With the manganese deposits, plugs must be replaced every 3 to 4 years.

The Clean Air Act of 1963 stipulates that states cannot regulate fuel quality. In broad terms, that is true, but only for purposes of emissions control. The EPA has interpreted this in long-standing cases from when that provision was adopted in 1977. States may adopt provisions related to gas for purposes other than air pollution control, specifically automotive emissions control. To protect consumers, several states have adopted requirements to ban things in gas that cause water-quality problems after leaks. The EPA allows states to adopt requirements concerning the use of ethanol in gas. Several states require that every gallon of gas sold within them contain a certain percentage of ethanol.

We view the banning of MMT as a consumer-protection issue, to protect the substantial investments they make in their vehicles. Repairs of the aforementioned problems are not insignificant, and they will and do occur if products containing MMT are used consistently.

Chair Ford:

Can you cite two examples in Nevada when the use of MMT has caused breakdowns of catalytic converters?

Mr. Cabaniss:

We are not certain if or how much gas containing MMT has been brought into Nevada since the ban was lifted. Even in cases when it was used consistently, it is probably too early for damage to have manifested itself.

Chair Ford:

Can you cite two examples in the Nation when MMT has caused breakdowns of catalytic converters? The only state that bans it outright is California. Is that correct?

Mr. Cabaniss:

Actually, other states simply do not prohibit the use of MMT.

Chair Ford:

Does only California ban it entirely?

Mr. Cabaniss:

That is correct. The key is when you consider the overall gas pool in the Nation, 30 percent to 35 percent of it is reformulated and cannot have metallic additives, including those based on manganese. Reformulated gas is required in the Country's most polluted areas: the Northeast, Southeast and California.

Several years ago, the EPA approved a common additive, ethanol. In 2007, Congress passed the Energy Independence and Security Act, which required the use of renewable fuels—mainly ethanol—in gas throughout the Nation at a rate of 36 billion gallons a year by 2022. That was about 20 percent of the existing gas pool in 2007. In most places, the gas has a maximum of 10 percent ethanol. Because of the EPA's Renewable Fuels Standard program, almost all U.S. gas has ethanol, which means it cannot also contain MMT.

Chair Ford:

How can we quantify the effects of MMT on vehicles, from a consumer-protection standpoint, if people cannot use it because of ethanol?

Mr. Cabaniss:

The research on MMT's use, [Exhibit I](#), goes back to the 1990s and early 2000s when there were many questions about manganese oxides. Methylcyclopentadienyl manganese tricarbonyl was used as a predominate additive in Canada, which voluntarily suspended its use.

Chair Ford:

Are you referring to the studies that found MMT affects catalytic converters' effectiveness?

Mr. Cabaniss:

Yes. There are no new studies.

Senator Goicoechea:

One of your handouts states, "MMT is prohibited in federal and California reformulated gasoline," which indicates a Nationwide ban. Are you saying the majority of gas containing MMT is in rural areas?

Mr. Alonso:

We do not know, which is the problem. This bottle of octane booster contains MMT. Consumers can read the label then decide to risk using it in their classic cars. Gold Eagle Company and other manufacturers of octane boosters state on the labels that their products do "not contain harmful MMT." This marketing indicates there have been long-term issues with it. We do not know if MMT is entering the State and if anyone is inadvertently using it.

Canada, Europe and China have stopped using or limited the use of MMT. The European Union was recently sued by Afton because of the severe restrictions on MMT's use. The European Court of Justice opined that those restrictions would not stay in place. The only reason MMT is now used in Third World countries is that they are trying to wean themselves off leaded gas.

Senator Goicoechea:

I probably burn more gas in rural Nevada than anyone in this room. I put 130,000 miles on a Hemi V-8 engine in the last 2 years. Its spark plugs are still good, and it is running well. That indicates my gas did not contain MMT.

Jack Stanko (President and Owner, Champion Chevrolet):

I am past president of the Nevada Franchised Auto Dealers Association. Eight or ten years ago, we had a bad drivability problem with many vehicles due to low-grade fuel. The owners' and warranty manuals of General Motors Company (GM) caution against using products containing MMT because customers would have to pay for repairs of MMT-damaged components. Our customers with small-engine vehicles had a terrible time with cold starting in the morning. Engines would stumble and stall and then would not run for 10 to 15 minutes. General Motors ended up buying back 15 to 20 vehicles from my dealership. Poor-quality gas had caused the problem. The GM owners' manual states, "Do not use gasolines with MMT as they can reduce spark plug life and affect emission-control system performance." The 2012 *Chevrolet Limited Warranty and Other Assistance Manual*'s list of what is not covered includes:

Damage due to contaminated or poor-quality fuel. Incorrect fuel may cause drivability problems and damage oxygen sensors and catalytic converters. Damage from poor fuel quality or incorrect gasoline may not be covered under warranty. ... Use of fuel containing MMT causing damage to the emission system or causing poor performance would most likely not be covered under warranty. ... [If damage is caused by] using a fuel not recommended by the manufacturer, the consumer will have to pay for repairs of the damage caused by the incorrect fuel.

Other companies, like Honda; BMW of North America, LLC; and Toyota Motor Corporation, have the same manual disclaimers about MMT. I sat in on a Board of Agriculture hearing where there was a question as to whether emissions from vehicles using MMT cause Parkinson's disease. As the owner of a business with 70 to 100 vehicles a day coming through a service department with 50 to 60 technicians and many customers, I do not want fumes in my building that might affect health.

Senator Settelmeyer:

Even if the State allows the use of MMT, our constituents' warranties could be voided. Have there been any studies of MMT beyond its effects on vehicles? Are there reports of health problems? Some Lake Tahoe-area gas stations have had fuel leaks.

Mr. Stanko:

The studies indicating MMT could cause Parkinson's disease through inhalation were discussed at the Board of Agriculture hearing. Catalytic converters contain small pellets that, if they get jammed, create intense heat, causing emissions systems to malfunction.

Chair Ford:

Did you say we do not know, without proper labeling, if MMT is being used in Nevada?

Mr. Stanko:

That has been the issue all along. You can buy a product containing MMT at an auto-parts store because the label tells you what is in it. Consumers can choose other octane boosters that do not contain MMT. At the gas pump, there is no way to track the presence of MMT. Its use is so limited in the Nation, other

states do not track it. Senator Goicoechea may not be buying it in his district, but it could be somewhere else in the State. It could be in gas sold by independent stations in Washoe or Clark Counties. That is a big concern.

From a policy standpoint, the MMT ban was in place for many years and did not affect anyone. If the State cannot afford to track and label products containing MMT, consumers should know a potentially dangerous chemical is going into their gas tanks. Many studies indicate that MMT is a generally dangerous substance to breathe and causes many health issues.

Chair Ford:

Tell us about the proposed labeling requirement. Would that be prohibitively expensive? Instead of banning MMT outright, could we "let the buyer beware" at the pumps?

Mr. Alonso:

That would be the most responsible thing to do. It would be inexpensive to implement. It would be easy for rural gas stations to put simple warnings on the pumps advising consumers to look at their owners' manuals' positions on MMT.

Chair Ford:

Would you support the bill if pumps with MMT in the gas were labeled instead of banning it outright?

Mr. Alonso:

Obviously, our preference would be to ban MMT, but if the Committee allows consumers to know it is in State gas, we will accept that.

Mr. Cabannis:

We have debated the labeling issue with NDA for about 18 months, and we have worked on proposed language for a label. In order for gas station operators to know if MMT is present, the information needs to be in the transfer documents following the chain of the delivered gas. That way, operators will know if they need to label their pumps.

Kyle Davis (Political and Policy Director, Nevada Conservation League & Education Fund):

I weighed a lot of research on both sides of the MMT debate when A.B. No. 453 of the 76th Session was discussed. I am convinced that MMT does damage catalytic converters and increase air pollution.

Sean T. Higgins (Afton Chemical Corporation):

You have a handout, [Exhibit L](#), on why Afton opposes S.B. 433. The Board of Agriculture approved the use of MMT less than 2 years ago after many hearings, research and review of background data. Manganese, the chief component of MMT, is the twelfth most common essential element in the world. Methylcyclopentadienyl manganese tricarbonyl has been used worldwide for more than 30 years as an octane booster. The EPA has determined that MMT is safe under the Clean Air Act of 1963, as per page 11 of my presentation, "Statement for the Record" ([Exhibit M](#)). Page 12 of [Exhibit M](#) also cites numerous studies about the safety of MMT.

Chair Ford:

The EPA did not approve MMT because it is not deleterious to health. Did we not hear testimony to that effect?

Mr. Higgins:

Page 12 of [Exhibit M](#) lists 13 studies that found MMT does not adversely affect human health. In 1973, the EPA stated, "There is a reasonable margin of safety with the use of manganese in gasoline" In 1975, the EPA stated, "There is no evidence that predicted manganese concentrations resulting from the use of [MMT] would result in adverse health effects." In 1994, the EPA stated, "Manganese emissions from MMT use will not jeopardize public health."

Chair Ford:

Do you have anything more recent than 35 years ago?

Mr. Higgins:

Page 12 of [Exhibit M](#) cites a 2008 Health Canada study.

Chair Ford:

We just heard that Canada restricted use of MMT based on research that found it clogged catalytic converters and was deleterious to health. Do you disagree with that testimony?

Mr. Higgins:

Market conditions dictate the use of MMT, not health or other concerns. It is approved for use in Canada and 49 other countries. In 2005, Environment Canada concluded that during 2002 to 2004 in Canada, "no Notice of Defect was found to be potentially caused by MMT." No catalytic converters were damaged by MMT. There is no need to ban a product that has been used for more than 30 years. The bill's proponents cannot cite anything but anecdotes that prove MMT has caused catalytic converter damage or health risks.

Chair Ford:

What do you think about requiring labels on gas pumps with MMT?

Mr. Higgins:

Such a label would have a single purpose. If you had a catalytic converter problem, and the manufacturer could prove you had used gas with MMT, your warranty would be voided. Federal law requires that any vehicle sold in the Nation must use approved gas. Labels would not protect consumers, just vehicle manufacturers from damage suits.

Chair Ford:

Is there a conspiracy against MMT? Why would vehicle dealers want to ban it? Why are they saying that warranties are void if owners use MMT-based additives?

Mr. Higgins:

I do not know. The opponents of S.B. 433 rely mostly on the Sierra Research, Incorporated, study, but other studies show that MMT did not cause failure of catalytic converters. I can tell you that MMT is used in 50 countries and 48 U.S. states.

Chair Ford:

The bill's proponents say Nevada could be the second state to ban MMT, but the other states do not prohibit it. They also say there is no accurate record of MMT's use because it cannot be combined with ethanol. Is not the argument persuasive that 48 states do not ban it?

Mr. Higgins:

Absolutely. That 48 states and the EPA have allowed the use of MMT for more than 30 years tells us something. If there were dire health or mechanical consequences, a definitive study would have emerged over that time showing that. Yet, no such study exists.

Chair Ford:

Does the EPA have the authority to ban the use of a product based on health risks, as opposed to emissions and environmental-protection issues?

Mr. Higgins:

The EPA has looked at whether MMT adversely affects health. It could ban products on that basis. The EPA was the agency that exonerated MMT on health effects, as per page 12 of [Exhibit M](#).

Chair Ford:

Are you saying that if the EPA wanted to ban MMT because it caused Parkinson's disease that is within its administrative authority?

Mr. Higgins:

I do not know.

Peter Krueger (State Executive, Nevada Petroleum Marketers and Convenience Store Association):

The Nevada Petroleum Marketers and Convenience Store Association is the organization that requested a change in the MMT regulations in 2009. In 1991, this Legislature approved a statute that Nevada fuel composition could not be substantially different than that of California. Part of that was the listing of MMT, because California had banned it. The statute stayed on the books, and many people did not know about it.

The decision to use MMT in Nevada is market driven. Many factors affect the price of ethanol, which is tied to the success of the U.S. corn harvest. There is a lingering concern that many agricultural products are being diverted for the production of ethanol, rather than for human or livestock consumption. The use of MMT is another way to achieve an octane boost.

Nevada imports conventional gas without additives. Ethanol must be blended into fuel because gas containing it cannot run in pipelines due to its corrosive

nature. Depending on where the product is going, terminal managers like Lawrence Waugh are careful not to add MMT to ethanol-blended gas. The use of MMT is driven by the price of ethanol. In hearings on A.B. No. 453 of the 76th Session, I testified that price drives the supply of gas restricted by MMT. My organization asked that the ban on MMT be removed, and the NDA did so.

Chair Ford:

Why was MMT banned in the first place?

Mr. Krueger:

It was the result of a 1991 statute that provided that Nevada gas had to be formulated substantially the same as that of California.

Chair Ford:

Could MMT be used before 1991?

Mr. Krueger:

I do not know if MMT had been developed by 1991. The process of labeling gas containing MMT was proposed in May 2012. The NDA has held two workshops and one public hearing on the issue. In June 2013, the Board of Agriculture is going to consider labels; yet this did not satisfy S.B. 433's proponents, who advocate an outright ban on MMT. That same effort failed in the 76th Session. We believe MMT has a use in the commercial market as an ethanol alternative.

Chair Ford:

Does the Nevada Petroleum Marketers and Convenience Store Association object to the labeling plan?

Mr. Krueger:

Yes, we do.

Senator Goicoechea:

The majority of eastern Nevada gas comes from Salt Lake City, Utah. Does it contain MMT? How do consumers know that?

Mr. Krueger:

Yes. The majority of fuel in northeast Nevada comes from Salt Lake City's refineries. When it leaves the refineries, the gas is conventional with no additives, including ethanol or other proprietary additives. When the gas gets to

suppliers, some of which are in Elko and Reno, the product is blended based on retail gas stations' wants. This is not a magical thing forced upon stations.

Chair Ford:

[Exhibit I](#) states:

The American Academy of Pediatrics in its 2003 practice guidelines to pediatricians stated "to permit addition of MMT to the US [S/C] gasoline supply would not be prudent," and "Prevention of exposure to the most toxic additives to gasoline ... is best achieved by government regulation or phasing out of these compounds."

"The Declaration of Brescia on Prevention of the Neurotoxicity of Metals" ([Exhibit N](#)) states, "The addition of organic manganese compounds to gasoline should be halted immediately in all nations." I am not convinced that these claims are untrue. Can you respond to testifiers' claims that MMT harms human health?

Mr. Krueger:

I am a fuels guy, not a physicist or chemist. You asked Mr. Higgins if the EPA could ban a product based on health concerns. I do not know.

Mr. Higgins:

This is the federal government's response to the EPA studies:

The U.S. EPA has characterized MMT as having been subjected to the most extensive test program ever conducted, while the government of Canada has noted the amount of scientific information on the neurotoxicity of an exposure to manganese is substantial, compared to the equivalent information on the toxicity and potential exposure associated with some of the alternatives. ... MMT poses no health risk.

Two federal agencies have reached the same conclusion about the safety of MMT.

Lawrence Waugh:

I have more than 45 years' experience in the automotive and petroleum industries. I served two terms as the Board of Agriculture's petroleum

representative and two terms as Board of Agriculture chair. The approval of MMT was not driven by price considerations. The chief concern was to achieve a viable, legal and additional supply of gas for the State.

Nevada is like an island, totally dependent on importing petroleum products. Occasionally, our main supply points, primarily from West Coast refineries, have problems. We then must scramble to find alternative gas suppliers. We have gone through this many times as the biggest distributor of petroleum products in northern Nevada. The State must look for alternatives to the West Coast refineries, and these are the Salt Lake City, Idaho or Colorado refineries. However, we cannot bring in illegal or preapproved gas. How do we protect Nevadans from fuel shortages and protect our fuel industry?

In 1995, the EPA approved the use of MMT after extensive health-risk, environmental and automotive tests. That is why Nevada was urged to approve its use. The issue had been on the books since 1991 without being addressed. California bans MMT in gas, but the sale of the additive Mr. Alonso showed us is allowed. Consumers there can make up their minds about its use. If new research shows that MMT is unsafe, the battleground should not be in this Committee room; it should be with the EPA or the Canadian government. So much research has been done on MMT. Statements we have heard today are untrue. Many countries and 48 states have approved the use of MMT. These facts are on the EPA's or Afton's Website.

Chair Ford:

Maintaining sustainable gas supply for Nevada is a valid concern.

Mr. Hillerby:

The Worldwide Fuel Charter, [Exhibit L](#), discusses health studies on MMT. The opponents of S.B. 433 submitted a document stating the legal level of MMT in U.S. gas is 8.8 milligrams per liter (ml/L). In Europe, the allowable level is 6 ml/L which will drop to 2 ml/L on January 1, 2014. China will lower its allowable level to 2 ml/L. China has a poor record on emissions control. Yet, it has seen the effects of MMT and has lowered the level to less than one-quarter of that of the United States. The EPA's research is 20 years old but clearly indicates MMT harms health.

This argument is similar to one many decades ago about the use of lead in gas. Lead oxide is clearly dangerous. One of our handouts states we should not make the same mistake in the future about the use of manganese in gas.

Chair Ford:

Can you answer my question about whether the EPA can ban something based on health risks?

Mr. Hillerby:

I believe that is true. After the Federal Register findings, [Exhibit K](#), and the lawsuit against the EPA to force it to grant the waiver to Afton, there were still health concerns. The judge said the EPA was limited to the emissions-control devices section of the Clean Air Act of 1963, under which the waiver request was made. The vehicles cited were much earlier models of today's vehicles with lower emission-control requirements.

Chair Ford:

Now that we know the Board of Agriculture is involved in investigating labels, why should the Committee subvert the authority of the agency charged with dealing with the MMT issue? Why do you not instead deal directly with the State Board of Agriculture?

Mr. Hillerby:

We are working with NDA. We are here today because the ban is a much more appropriate public policy statement for the Legislature to issue. The evidence supports the dangers of MMT. This is a consumer-protection and a consumer-awareness issue.

Mr. Alonso:

We are working with NDA on labeling, a discussion we began when the MMT ban was lifted. The Board of Agriculture repeatedly refused our request to use labels or track the use of MMT in Nevada, mostly because of the costs involved. We believe that only S.B. 433 would give petroleum manufacturers some relief and protect consumers. We have nothing to gain from this. We want the best fuel in our vehicles so they run well and consumers are happy. That is how you sell cars. If the use of MMT is not about lower gas prices, why was the Theodore Roosevelt Institute's study "Expected Impact of Lower Production Costs on Gasoline Prices: Nevada and MMT" ([Exhibit O](#)) released?

Chair Ford:

We will close the hearing on S.B. 433.

SENATOR GOICOECHEA MOVED TO DO PASS S.B. 464.

SENATOR SETTELMAYER SECONDED THE MOTION.

THE MOTION PASSED UNANIMOUSLY.

* * * * *

SENATOR SEGERBLOM MOVED TO DO PASS S.B. 468.

SENATOR GOICOECHEA SECONDED THE MOTION.

THE MOTION PASSED UNANIMOUSLY.

* * * * *

Chair Ford:

We will open the work session with S.B. 72.

SENATE BILL 72: Makes various changes concerning cruelty to animals.
(BDR 50-114)

Michael J. Stewart (Policy Analyst):

Senate Bill 72 deals with horse tripping. I am presenting you with a conceptual amendment in the work session document ([Exhibit P](#)).

The Committee heard the bill on March 12, 2013. Since then, the bill's sponsor, Chair Ford and various interested parties have worked to achieve an agreeable compromise on S.B. 72. The conceptual amendment would amend section 1, subsection 5, paragraph (b); section 1, subsection 11, paragraph (a); section 1, subsection 11, paragraph (a), subparagraph (2); and section 1, subsection 11, paragraph (b). It would eliminate section 1, subsection 5, paragraph (c), which involves steer tailing.

Senate Bill 183 involves manufacturers' recycling programs of electronic devices. I am submitting the work session document ([Exhibit Q](#)).

SENATE BILL 183: Enacts provisions governing manufacturers of certain electronic devices. (BDR 40-556)

The bill would authorize a manufacturer or group of manufacturers to carry out a program to collect, transport and recycle covered electronic devices. Several options are provided for how manufacturers may do this. The bill would require a registration program through the Division of Environmental Protection (NDEP), DCNR. The bill would require NDEP to publish on its Website a list of each registered brand and manufacturer. The bill would also allow the NDEP to fine violators of its provisions and requires the NDEP to conduct a workshop to review the impact of the annual registration fees.

The bill's sponsor, Senator Justin C. Jones, Senatorial District No. 9, has worked with testifiers on the proposed amendments in [Exhibit Q](#). The first amendment is from International Game Technology and would amend the definition in section 9 of "manufacturer." The second amendment is from Apple, Incorporated, and would amend the definition of "covered electronic device" in section 7. The third amendment is to section 5, subsection 2, as proposed by Senator Jones. It would delete provisions specifying what "computer" does not include. The fourth amendment, from the Retail Association of Nevada, would give retailers a year to clear out existing stock before they had to comply with bill's provisions and mandates that some online retailers must comply with its provisions. A conceptual amendment to section 18, subsection 3, would specify that the NDEP could use the Account for Recycling Covered Electronic Devices to cover the costs of the recycling program.

Chair Ford:

Which of the proposed amendments to S.B. 183 would you accept?

Senator Justin C. Jones (Senatorial District No. 9):

I agree to all of the proposed amendments. This important program would provide grants to municipalities and counties, particularly in rural areas, to recycle electronics.

SENATOR SEGERBLOM MOVED TO AMEND AND DO PASS S.B. 183.

SENATOR MANENDO SECONDED THE MOTION.

Senator Settelmeyer:

I am concerned the bill puts the recycling onus onto manufacturers, not the people who toss electronic devices into the trash. I will vote no here, but I may change my vote on the Senate Floor after further discussion.

THE MOTION PASSED. (SENATOR SETTELMEYER VOTED NO.)

* * * * *

Mr. Stewart:

Senate Bill 371, sponsored by Senator Ben Kieckhefer, Senatorial District No. 16, would prohibit the intentional feeding of any wildlife species except birds. Proposed amendments are included in the work session document ([Exhibit R](#)).

SENATE BILL 371: Prohibits a person from intentionally feeding any species of wildlife other than a wild bird. (BDR 45-838)

The mock-up of Proposed Amendment 7889 in [Exhibit R](#) specifies that intentional feeding only applies to big-game mammals and coyotes and outlines penalties for violations. The amendment provides for exemptions for workers from the NDOW and the Animal and Plant Health Inspection Service, U.S. Department of Agriculture. The amendment defines "big game mammal," clarifies the definition of "intentionally feed" and deletes the term "chumming."

A second amendment, in [Exhibit R](#) from Beverlee McGrath would add a new section to the bill specifying that "intentional feeding" does not apply to qualified wildlife rescue and rehabilitation groups or private property owners with the approval of NDOW.

Senator Ben Kieckhefer (Senatorial District No. 16):

The proposed amendments work together with the intent to ensure rescue organizations may function within the bill's structure. In the proposed amendment by Ms. McGrath, "certified and approved by the Nevada Department of Wildlife" in her new paragraph (a) could be read in multiple ways. Our interpretation is organizations could be approved on a case-by-case basis to feed wildlife.

Senator Goicoechea:

I am concerned about the bill's inclusion of coyotes in the big-game mammals list. In sheep and livestock operations, it is common to put out poisoned bait for predatory coyotes. Coyotes are not game animals, so why does the bill focus upon them?

Rob Buonamici (Chief Game Warden, Division of Law Enforcement, Department of Wildlife):

Senate Bill 371 is designed to restrict feeding of wildlife. Another regulation in the NAC covers baiting of big game, which coyotes are not considered to be. Senator Goicoechea is describing baiting for purposes of hunting, from which coyotes are also excluded. That situation is not feeding but baiting, which is legal.

Chair Ford:

Is "feeding" defined in statute?

Senator Goicoechea:

That is my concern, that "baiting," not "feeding," is defined in the NAC. When it is necessary to remove a coyote, we need that definition. I am concerned the bill could be too far-reaching.

Chair Ford:

"Intentionally feed" is defined in the bill as:

to supply, provide or otherwise make available any salt, grain, meat or other form of nourishment. The term does not include: (a) Any incidental or unintentional feeding of wildlife, including, without limitation any such feeding associated with ...

Then the bill lists exceptions, including "Any accepted agricultural or livestock practice." Is the baiting of coyotes to manage predators that you described an acceptable livestock practice?

Senator Goicoechea:

That could be subject to interpretation, which makes me nervous.

Brenda Erdoes (Counsel):

I agree that the language is unclear, and the Legislative Counsel Bureau Legal Division could craft a clarifying amendment. Baiting of coyotes could also be seen as "chumming."

Senator Goicoechea:

My second concern is why coyotes are even mentioned in the bill if they are not a game animal?

Senator Settelmeyer:

Is the concern with the coyotes a situation that you run into, that people are feeding them in backyards and enticing them into urban areas? Is that causing a problem for the NDOW? What is the origin of the coyote language?

Mr. Buonamici:

The coyote issue stems from urban areas of Las Vegas Valley where people feed them. That attracts coyotes to the inner city, which is a problem for the NDOW. We could insert something to the effect of, "This section does not apply to the hunting of coyotes."

Senator Settelmeyer:

My question goes to the concept of saying, "agricultural practices," because you can debate what is "approved" therein. In Ms. McGrath's proposed amendment indicating that "any qualified animal or wildlife rescue or rehabilitation organization" can feed, is that at their facilities?

Senator Kieckhefer:

We discussed with the NDOW that the bill would not be a blanket approval of organizations feeding wildlife. Rather, only properly licensed and certified groups could do so in specific incidences.

Beverlee McGrath (American Society for the Prevention of Cruelty to Animals; Best Friends Animal Society; Nevada Humane Society; Northern Nevada Society for the Prevention of Cruelty to Animals; Nevada Political Action for Animals; Lake Tahoe Humane Society and Society for the Prevention of Cruelty to Animals; Compassion Charity for Animals; Pet Network of Lake Tahoe; Wylie Animal Rescue Foundation; PawPac; Lake Tahoe Wolf Rescue):

Our contention is that in an emergency situation, feeding groups that are preapproved and certified do not need additional written permission. Our amendment was agreed upon by all interested parties.

Senator Settlemeyer:

Are you saying you do not need additional authority from the NDOW?

Ms. McGrath:

Wildlife rescue and rehabilitation groups would need additional approval, just not written. A phone call would be sufficient.

Mr. Buonamici:

While I appreciate the effort to rescue injured or starving animals in emergencies, I am uncomfortable with the phone-call concept if, for example, we might be called at 2 a.m. Our dispatch hours are 6 a.m. to 11 p.m., so if a group leaves us a voice mail outside of that time, and we have not approved their action, that is a concern. We would prefer written approval for feeding.

Chair Ford:

I disagree with paragraph (b) of Ms. McGrath's proposed amendment. It defeats the purpose of what we are trying to avoid in Incline Village, where private property owners are feeding bears. Any amendment needs to exclude the language in paragraph (b).

Ms. McGrath:

We are fine with deleting paragraph (b) of my proposed amendment. The point we are trying to stress is that in an emergency situation, if the feeding groups call the NDOW on a Sunday night, they may just have to leave a message. Preapproved and certified organizations should be able to assist animals in rare emergency situations.

Senator Goicoechea:

We need some clarification, like adding that a group can assist animals "at its facility." If a licensed group decides that a deer herd is starving someplace and starts hauling hay up a hillside, we are right back to where we started on this issue.

Chair Ford:

We will reopen the hearing on S.B. 72. It is critical for all parties to understand that no one endorsed the idea of intentional tripping of horses. The amendments, [Exhibit P](#), address the potential impacts on lawful rodeo events, cultural practices and the needs of ranchers and charreada participants.

Senator Manendo:

Horse tripping has been a contentious issue for almost 20 years. Senate Bill 72 is landmark legislation regarding animal cruelty and is being watched nationwide.

Senator Settlemeyer:

I appreciate the amendments' concepts and intents to stop intentional horse tripping. The original bill created a situation in which a person walking a horse that trips would become a felon.

Oscar Peralta (Nevada Hispanic Legislative Caucus):

With the compromise of the amendments, we believe the bill now adequately protects the cultural and historical sport of charreada and its three roping events. The concerns about possible animal cruelty and botched roping are addressed.

SENATOR SEGERBLOM MOVED TO AMEND AND DO PASS AS
AMENDED S.B. 72.

SENATOR MANENDO SECONDED THE MOTION.

THE MOTION PASSED UNANIMOUSLY.

* * * * *

Mr. Stewart:

Senate Bill 465 would increase the NDA's annual head tax on livestock as outlined in the work session document ([Exhibit S](#)).

SENATE BILL 465: Revises provisions governing the special tax on certain livestock. (BDR 50-1147)

The bill would increase the head tax on certain breeds of livestock, would allow the NDA to assess livestock taxes retroactively and would change penalties for failure to pay the taxes.

During the April 2 testimony, Senator Goicoechea had requested the language of section 2, subsection 1 be clarified. The intent was to ensure that any unpaid taxes could be collected by the NDA for 5 years after they were due, rather than in the 5 fiscal years immediately following the fiscal year in which they were due. The amendment proposed in [Exhibit S](#) would replace section 2, subsection 1.

Senator Goicoechea:

I do not know when that 5 years' statute of limitation began. I am comfortable with the amendment.

SENATOR GOICOECHEA MOVED TO AMEND AND DO PASS AS AMENDED S.B. 465.

SENATOR SEGERBLOM SECONDED THE MOTION.

THE MOTION PASSED UNANIMOUSLY.

* * * * *

Mr. Stewart:

Senate Joint Resolution (S.J.R.) 1 would declare that wild horses and burros are an integral part of the ecosystems and rangeland of Nevada and the West. There are proposed amendments included in the work session document ([Exhibit T](#)).

SENATE JOINT RESOLUTION 1: Expresses support for wild horses and burros in Nevada. (BDR R-115)

The resolution states the animals could potentially promote ecotourism, especially if the State built "eco-sanctuaries." The amendment would delete certain references to "federal land management agencies" and "public and private lands" and the "Whereas" clause limiting the number of wild horses and burros.

Senator Settlemeyer:

The Committee discussed the concept of adding the animals should be limited to "appropriate management levels." Is that included in an amendment?

Chair Ford:

No. The resolution's proponents removed language that would necessitate the mention of appropriate management levels.

Senator Goicoechea:

The amended resolution seems only to pertain to private property or ranch holdings. The Bureau of Land Management (BLM), the U.S. Forest Service (USFS) and other public stakeholders are stricken from the provisions. Is that the intent? If the intent is that ecotourism businesses should be encouraged, we need to be clear that herds on public lands are not addressed.

Senator Settlemeyer:

I accept the resolution if we stick to the concept of the amendment's section 3, [Exhibit T](#), which concerns "wild horses and burros living on private lands that are under the jurisdiction of the State Department of Agriculture. "

SENATOR SEGERBLOM MOVED TO AMEND AND DO PASS AS AMENDED S.J.R.1.

SENATOR MANENDO SECONDED THE MOTION.

THE MOTION PASSED UNANIMOUSLY.

* * * * *

Chair Ford:

We will close the work session and open the hearing on S.B. 390.

SENATE BILL 390: Enacts provisions relating to hydraulic fracturing.
(BDR 46-929)

Senator Tick Segerblom (Senatorial District No. 3):

You have a copy of my presentation ([Exhibit U](#)) on hydraulic fracturing (fracking). Senate Bill 390 is an attempt to begin the process of regulating fracking in Nevada. Mr. Davis and I have looked at regulations in our surrounding states to formulate the basic legal parameters in the bill.

The problem with fracking is substances are injected into the ground that could potentially pollute groundwater. Which governmental agency should be responsible for regulating and permitting fracking operations? We would like to see the NDEP be the primary oversight agency because it deals with polluted groundwater. Some of S.B. 390's provisions may already be in the NRS, but we are pulling them together to start the public debate. A government agency has estimated that south of Elko County, up to 50,000 barrels of oil and gas could be removed annually by fracking. This would create a huge environmental impact between the mine proper and transporting the oil and gas out of the State.

Chair Ford:

The bill would not ban fracking in Nevada. Is that correct?

Mr. Davis:

Yes. It would simply create a regulatory framework for it.

Senator Settlemeyer:

Have not some fracking regulations already been adopted in the NRS? Do not geothermal companies use a process similar to fracking?

Mr. Davis:

The Division of Minerals (NDOM), Commission on Mineral Resources, permits mining exploration and geothermal wells. The method by which oil and gas fracking is done is significantly different from geothermal drilling.

Fracking is a practice that has gained a lot of notoriety in recent years because it is rapidly becoming one of the predominant ways in which the United States develops oil and gas. When we heard that fracking is beginning to come to

Nevada, we felt we needed to get ahead of the curve on legislation and regulations to protect land, air and water resources.

You have a copy of an *Elko Daily Free Press* article ([Exhibit V](#)) about Noble Energy, Incorporated's (Noble) planned fracking test drilling in Elko County. Quotes from the NDOM concern me because there is an assumption by the agency with authority to regulate fracking that the process is safe and it knows what is in fracking fluids. There have been many examples across the Country of significant environmental problems caused by fracking fluid, with no requirements that the chemicals therein be disclosed. Given fracking's potential impact on groundwater and air quality, we feel that the NDEP has the most expertise for permitting and regulating the industry.

Chair Ford:

Where does the regulatory oversight of fracking lie in other states?

Mr. Davis:

It varies between environmental protection agencies and other agencies. In Nevada, the BLM is involved, and potentially the USFS could be involved. You have a copy of an Associated Press article ([Exhibit W](#)) about the accidental spraying of fracking fluid from a Fort Collins, Colorado, well. More than 84,000 gallons of fracking fluid were released for almost 30 hours. This is an example of why fracking operations need to be regulated.

Chair Ford:

How does accidentally released fracking fluid affect the environment?

Mr. Davis:

There is no legal requirement to disclose the chemical content of fracking fluid. It could contain potential carcinogens. The flow-back water released from the well and water from ground formations could be dangerous and even radioactive. When these fluids come into contact with air, contaminants and pollutants enter the environment.

Senator Goicoechea:

Would not those be chemicals occurring naturally in the soil? Fracking engineers are not injecting radioactive ions into the ground.

Mr. Davis:

That is correct. Radioactive isotopes do occur naturally. However, the concern is that when the fracking process starts, they are safely in the ground and then are brought to the surface and are in contact with other water sources.

Senator Goicoechea:

Elko County has known oil reserves. The many previous permitted and supervised drilling operations have had no problems. They have already drilled a significant number of holes. I am concerned that, after the 2010 BP oil spill in the Gulf of Mexico, we have forgotten that sometimes accidents just happen. I do not want to paint ourselves into a corner with a new industry that needs the opportunity to move forward. I have seen oil wells drilled all over the State for all of my life, and, so far, we have not had an environmental disaster. How much regulation do we want to impose upon fracking?

Mr. Davis:

The Committee should determine the appropriate level of regulation. Given that fracking is a relatively new process, it differs from the kind of drilling we have seen in the past. Since there have been concerns about it in other states, we need to draw on other states' experiences.

Chair Ford:

If fracking fluid is contaminated and flow-back water is potentially radioactive, is there a problem if it gets into drinking water?

Mr. Davis:

We certainly do not want to drink it. The deeply buried formation water is not being used for drinking, but if it contacts groundwater or surface water, that is the concern.

Chair Ford:

The fracking fluid-spraying incident outlined in [Exhibit W](#) lasted almost 30 hours. That causes concern if it could have potentially gotten into the drinking water supply.

Senator Goicoechea:

An oil well was drilled north of Warm Springs in Newark Valley. The water they hit at about 7,000 feet down was more salty than the ocean. The water was

naturally occurring, not something they pumped down there—it was what came out.

Mr. Davis:

My proposed conceptual amendment ([Exhibit X](#)) was drafted after discussions with the NDEP and Noble Energy. Rather than put the specificities of S.B. 390's provisions into the NRS, my proposed conceptual amendment would put them into regulations. The NDEP told me it already has the authority to regulate some of the things I listed. I am trying to ensure that we cover some of the issues that have arisen in other states and about which we are concerned.

The proposed conceptual amendment would ask the NDEP to develop a water-quality issues program. I listed some of the things that should be included in such a program, but the details would be decided by the NDEP. A key element in [Exhibit X](#) is when is the appropriate time to disclose the chemicals used in fracking fluid? The Website <<http://www.fracfocus.org>> (FracFocus) states the standard disclosure date is 60 days after operations cease. It is more appropriate for public awareness that the fluid's content be disclosed before it is injected into the ground. This list in [Exhibit X](#) gets at a lot of our concerns and puts them in regulation, not the NRS.

This list shows the areas we think the NDEP should regulate. We are not necessarily saying that the NDOM should not be in charge of permitting of drilling, which it already does for hard rock mining and geothermal drilling. Given that fracking pumps fluid into the ground, the NDEP should be the regulatory agency.

The proposed conceptual amendment's second paragraph in [Exhibit X](#) affirms what the NDEP already has the authority to do about fracking-related air pollutants. The third paragraph makes it clear that fracking operators would have to get permits from the NDEP. The fourth paragraph ensures that the NDEP and the NDOM would work well together, allowing for a memorandum of understanding (MOU) to streamline the permitting process. Paragraphs 5 and 6 would give the NDEP the authority to enforce S.B. 390's provisions and require it to post on its Website the permit-application information.

Chair Ford:

Are you proposing that we entirely replace the current bill with your proposed conceptual amendment?

Mr. Davis:

Yes.

Senator Goicoechea:

If a company wants to drill an oil well, which is the permitting agency other than a federal agency if it is on public land?

Mr. Davis:

The NDOM permits oil wells.

Chair Ford:

Why would we have a different permitting agency for fracking operations?

Mr. Davis:

The procedures involved in fracking are more complicated than those of traditional oil wells or hard rock mining. Fluid is pumped into the ground, fracturing the ground to force things to the surface. Maybe the NDEP has a role in permitting traditional oil drilling and possibly our current regulatory structure is inadequate.

Chair Ford:

Do you see a qualitative difference between fracking, which injects fluid into the ground to force something else out, and traditional wells that simply bring oil and gas out of the ground?

Mr. Davis:

Yes.

Senator Goicoechea:

The Grant Canyon oil field in Railroad Valley pumps water into the ground to aid oil recovery. This is not a new process in Nevada.

Senator Settlemeyer:

The geothermal drilling process uses a form of fracking-type drilling. Eight of the ten largest geothermal fields in the State are in my district, in Churchill County. Have there been any problems associated with that?

Mr. Davis:

I have not heard of any problems associated with those wells. I do not know the degree of similarity between fracking and geothermal wells.

Jeff van Ee:

I worked for the EPA's Office and Research and Development in Las Vegas from 1971 to 2005. I specialized in environmental monitoring of air, ground, water and surface waters. In the 1980s, I researched problems associated with injection wells. The U.S. oil and gas industry began in the late 1800s in Pennsylvania and in the early 1900s in places like Oklahoma. After the 1974 passage of the Safe Drinking Water Act, there was an increased effort to protect groundwater aquifers. The question was asked if oil and gas activities were contaminating drinking water aquifers.

I looked at potential pathways for aquifers contamination. One of the most obvious pathways was improperly plugged and abandoned oil wells, which could be conduits of contamination in aquifers' producing zones. A series of reports published in the 1980s showed how to locate abandoned oil wells. The question remained as to whether oil and gas wells were contaminating water and where those sources were.

Back then, the term was "injection wells," not "hydraulic fracturing." A byproduct of oil and gas production is saltwater, or brine, which needs to be disposed of. Often, saltwater is reintroduced into the producing formation to repressurize it or simply to dispose of the brine. People began to report that their wells were mysteriously going bad. That spurred us to develop techniques to map brine contamination from oil and gas fields. I was in charge of a U.S. Geological Survey study that looked at using geophysical methods to map brine contamination. Open-file reports of our findings were published.

Oil and gas fields can be messy operations with surface spills, problems with well construction and improperly constructed wellbores that allow pollutants to migrate upward. Determining the source of brine pollution was a real challenge. The studies were terminated in the late 1980s, which is unfortunate, because, 25 or 30 years later, the same basic questions are being asked: Where is water pollution coming from, how bad is it, and how can we correct it?

Senate Bill 390 and its proposed amendment are a good first step in answering those lingering questions. Nevada has had the luxury of not having to worry too

much about oil and gas activity and potential environmental contamination, particularly of aquifers. The time has come when those issues need to be addressed through legislation and the involvement of the NDEP. We do not want to dismiss or negate the important role of the NDOM. I hope that it would look at preventing contamination by addressing the way oil and gas wells are constructed, operated and maintained. The NDEP needs to monitor aquifers' background water quality. The proposed amendment assuages some of my concerns about the bill, because developing sampling plans is a difficult and complicated process better left to regulatory agencies than the Legislature.

Marjorie Sill:

My family has owned oil and gas rights in California for more than 80 years. Fracking began there about 5 years ago when there were no regulations to control the process's potential effect on water quality. Water is the most precious resource of Nevada. Fracking is relatively new to our State. The Railroad Valley oil wells were drilled without the technique. We need good regulation of fracking to protect our drinking water. Mr. Davis's proposed conceptual amendment, [Exhibit X](#), would not ban fracking in Nevada. Based on my family background, I do not oppose it, but I want to see the fracking process regulated and monitored to protect our drinking water. The NDEP is the best agency to monitor this, working in conjunction with the NDOM.

Joseph Johnson (Toiyabe Chapter, Sierra Club):

I was an exploration geologist and the senior controller of many exploration drill holes for minerals. The scale and potential environmental effects of multiple fracking wells are very different from those of traditional wells. I agree with the amendment's provision to give the authorization for most of fracking controls to go to rulemaking. The NDEP should have the primary responsibility for water and air quality. The NDOM is funded by the minerals-extraction industry, and its mission statement has an explicit statement of support for mining.

Senator Settelmeyer:

Fracking was developed in 1947 in Kansas. It seems to be similar to the (geothermal) hydro-shearing procedure. Is this how California regulates the process? Does the California Environmental Protection Agency regulate fracking?

Mr. Johnson:

California is developing fracking regulations. The process has been around for a long time. Over the last 20 years, oil and gas wells have had enhanced production. The difference between traditional wells and fracking is the latter has horizontal drilling from the initial drill holes for a mile or more. Formation waters collect in potentially gas-bearing strata, which is significantly different from hard mineral mining processes. Colorado has thousands of fracking holes in close intervals, so the potential for water pollution is much higher.

Jerome Walker (Charter Post Exploration LLC):

You have a copy of my written testimony ([Exhibit Y](#)). My company has oil and gas leases in eastern Nevada. I have been a petroleum and geothermal geologist for 38 years, including 10 years in Nevada. I am the director of the Rocky Mountain Section of the American Association of Petroleum Geologists Foundation. Fracking was developed in the late 1940s. Since then, more than 1 million successful fracking applications have taken place, allowing significant volumes of domestically produced hydrocarbons.

Chair Ford:

What do you disagree with in S.B. 390?

Mr. Walker:

The bill is significantly flawed. Section 3, subsection 1 calls for a permit for fracking to be used.

Chair Ford:

Are you looking at the proposed conceptual amendment in [Exhibit X](#) or the bill?

Mr. Walker:

I have not seen the proposed conceptual amendment, because Mr. Davis did not provide them.

Chair Ford:

Please look at the proposed conceptual amendment, because the bill is no longer relevant.

Paul J. Enos (Noble Energy, Incorporated):

I will show a video ([Exhibit Z](#)) that illustrates the fracking process. There is a lot of misinformation about fracking reality. Ninety percent of U.S. natural gas and oil now comes from fracked wells.

Chair Ford:

Senate Bill 390's purpose is not to ban fracking. What is wrong with Mr. Davis's proposed conceptual amendment that suggests the NDEP regulate fracking?

Mr. Enos:

Noble is in the early stages of exploration, so we do not know what that outcome will be. Even with the proposed conceptual amendment, the bill is too prescriptive, because it calls for a permitting process to happen before engineers even know if the well is to be fracked. The proposed conceptual amendment would require permits for regulating air and water quality prior to completion of well drilling. Noble is scheduled to drill five to eight exploration holes this summer. The permit would include well construction, drilling and completion. Noble is working with NDEP and NDOM on its permits and a process to move forward. We are also working with the Desert Research Institute (DRI), Nevada System of Higher Education, on a hydrologic-research study to make sure our groundwater resources are protected.

Even with the proposed conceptual amendment, Noble would be forced to wait for a new permitting program. The bill's implementation date is October 1, 2013, which would force us to start drilling in 2014 or 2015. It would also delay the DRI hydrologic-research study for a year, which means the NDEP and NDOM will not have data they need to establish the permit process mandated by S.B. 390.

Mr. Davis's article, [Exhibit W](#), describes the fracking fluid spill in Colorado. I called Noble and said, "You are the largest independent producer of oil and gas in Colorado. Do you have any insight into the Fort Collins incident?" Noble told me the fluid was recycled saltwater without other chemicals. A valve cracked, resulting in the spill. PDC Energy contained it and is doing baseline testing of that well to ensure its water is not harmful.

Chair Ford:

Did Colorado know the composition of the fracking fluid that was spraying out?

Mr. Enos:

It was saltwater. Colorado requires chemical disclosure of fracking fluid, and I believe it uses FracFocus to do so. FracFocus is a chemical-disclosure Website owned by the Ground Water Protection Council, of which state water-protection regulators are members. FracFocus lists every chemical in fracking fluid ([Exhibit AA](#)), sometimes using trade names to protect trade secrets. The site also has material safety data sheets so well operators know what is in the fluid if there are accidents. FracFocus listings include the composition of the water and sand—which constitute about 98 percent of what is injected into the hole—and antibacterial agents.

Mr. Davis's proposed conceptual amendment in [Exhibit X](#) requires disclosure before fracking, which Wyoming also requires. In that state, instead of having an independent, transparent Website like FracFocus available to the public listing, chemical trade names are not listed because of Wyoming's trade-secrets law. The Coca-Cola Company lists the ingredients of its products, but will not disclose the recipes. That is similar to what service companies that frack wells do. All states that require disclosure and companies that voluntarily disclose their chemicals use FracFocus to list every product injected into the ground.

Chair Ford:

Does Wyoming do what the bill's proponents are requesting, i.e., disclose every chemical going into the ground before drilling begins? Do you object to that?

Mr. Enos:

Wyoming adopted its disclosure law before FracFocus was developed. We would like to see the disclosure process use the site, even though it lists many trade names. The site is not protected under trade-secret laws. Wyoming will give the public lists of chemicals, but not their trade names. FracFocus has much more transparency. The NDOM has issued a directive that any fracking activity in the State must be registered with the site.

Chair Ford:

Is disclosure on FracFocus voluntary?

Mr. Enos:

In some states, including Nevada, listing of chemicals on the site is required. We would support codifying that in the NRS. Noble will work with the bill's proponents to ensure our environment and groundwater are protected.

However, even with the proposed conceptual amendment in [Exhibit X](#), the bill subverts a lot of the technical expertise of the NDEP and the NDOM by requiring companies to follow the list in the proposed conceptual amendment's paragraph 1.

Chair Ford:

Senate Bill 390, with the proposed conceptual amendment in [Exhibit X](#), would seek to authorize agency experts to be intimately involved with fracking. The Legislature is not mandating that requirement. It is authorizing the NDEP and the NDOM to work together to ensure Nevada has environmentally sound fracking processes.

Mr. Enos:

There are jurisdictional issues with the bill. Most fracking is regulated by state oil and gas commissions or entities similar to the NDOM. The Railroad Commission of Texas regulates fracking. Senate Bill 390 would set precedents, especially by requiring the NDEP to permit fracking operations before drilling occurred. That could potentially jeopardize Noble's Elko County project.

Chair Ford:

The proposed conceptual amendment in [Exhibit X](#), paragraph 1, states the NDEP would establish a program including, "An assessment of the hydrology and geology of the area." Is that a problem for you?

Mr. Enos:

Noble is working on that with the DRI to develop information it could share with the NDOM. Who will pay for the required hydrological and geological studies? Will it be the NDOM, the State or the drilling entity?

Chair Ford:

I did not think that would even be a question. The drilling entity should pay for it. Is my assumption incorrect?

Mr. Enos:

We are working with the NDEP and the NDOM and would agree that in some instances, the NDEP's authority is appropriate, such as for baseline monitoring, air-quality issues and regulating truck traffic. Splitting the regulatory authority could damage projects and hinder or stop fracking development.

Chair Ford:

We do not want to do that. What specific portions of the proposed conceptual amendment in [Exhibit X](#) are so onerous that they would prevent you from disallowing regulation by the NDEP and the NDOM?

Mr. Enos:

Paragraph 3 gives us concern about where Noble would fit into the permitting time frame.

Chair Ford:

This bill presents a good opportunity for environmental protection, and compromises can be made. What problems would you foresee so we can have the bill's proponents and representatives of the NDEP and the NDOM respond?

Senator Settlemeyer:

Paragraph 1 of the proposed conceptual amendment in [Exhibit X](#) includes a "provision for public involvement." What degree of involvement is this? Would companies have to obey the Open Meeting Law? Is it common in the NRS for the agencies to assess the fees necessary to run the program? I appreciate the concept that the State would not subsidize the program, but is that type of provision common in the NRS?

Chair Ford:

Yes. We have agencies, including the Office of the State Engineer, that do that all of the time.

Ms. Erdoes:

Other agencies have specific programs funded in that manner.

Mr. Enos:

Senator Settlemeyer is correct in questioning the degree of public involvement. Noble supports transparency, but would the company have to get approval to drill every hole in each phase of the operation? Noble has been forthcoming in its plans to work with the NDEP and the NDOM to craft sensible fracking processes. If Legislators want to study the issue in the interim and figure out the best way forward, we would support that. If you decide that the State shall regulate fracking and direct the NDEP and the NDOM to determine which agencies should regulate specific issues, we also support that.

When we talked to Mr. Davis, he said he would agree to that dialogue as long as there was a moratorium on our operations. Noble has invested \$40 million in the State, and over the next 4 years, it is looking at investing \$130 million more. Again, this is the exploration phase, with no guaranteed return on that investment.

Chair Ford:

Since Noble has already made the investment, any movement on the issue should not affect the company. We are talking about making prospective arrangements. I do not want to hamper economic opportunities in Senator Goicoechea's Senatorial District, but it is important to weigh that against the need to protect the environment.

John P. Sande III (Western States Petroleum Association):

You have a handout ([Exhibit BB](#)) on the Western States Petroleum Association's position on fracking. You also have a packet about the potential for fracking in California ([Exhibit CC](#)). The California Division of Oil, Gas and Geothermal Resources regulates fracking. The Monterey Shale formation is the subject of a huge California fracking project that will create 500,000 jobs by 2015 and 2.8 million jobs by 2020. In 2011, EPA administrator Lisa Perez Jackson stated, "I am not aware of any proven case where the fracking process itself has affected water." Ms. Jackson's predecessor in the Clinton Administration, Carol Browner, said, "There is no evidence that the hydraulic fracturing at issue has resulted in any contamination or endangerment of underground sources of drinking water." Environmental Defense Fund senior policy analyst Scott Anderson said, "The groundwater pollution incidences that have come to light to date have all been caused by well construction problems and not fracturing itself."

The Western States Petroleum Association feels that if Nevada makes it difficult to do fracking here, the oil industry just will go elsewhere. The Association told me that one-tenth of the oil produced daily in California exceeds the amount of oil produced annually in Nevada. California Governor Edmund Gerald "Jerry" Brown, Jr., has indicated the Monterey Shale project can bring the state a huge increase in tax revenue and gross domestic product. If a state is not receptive to the oil industry, the industry will not come in.

Chair Ford:

I support the concept of fracking, but I disagree that regulation will drive companies away from potentially billions of dollars in revenue. They will not run away if we require an EPA check-off list. We need to develop less onerous regulatory oversight that will, nonetheless, allow companies to operate in Elko County and elsewhere. We need to protect the drinking water of Senator Goicoechea's constituents. We can craft preventive, versus reactive, legislation. I want to prevent incidents like the Fort Collins spill from happening here.

Mr. Sande:

I will go back to my client and get some information about how other states regulate fracking and how my client proposes to address the problem so the Association members and others would be interested in operating in Nevada.

Alan R. Coyner (Administrator, Division of Minerals, Commission on Mineral Resources):

My Deputy Administrator, Mike Visser, will tell you about our division's position on S.B. 390.

Michael Visser (Deputy Administrator, Division of Minerals, Commission on Mineral Resources):

You have a packet of materials ([Exhibit DD](#)) on S.B. 390 and proposed fracking regulations in Nevada. My statements were prepared for the original bill. The NDOM would have been neutral on S.B. 390. We would remove just one component based on the proposed conceptual amendment, [Exhibit X](#).

The NDOM has sufficient authority under NRS 522 and NAC 522 to regulate fracking as it pertains to the design, engineering, drilling and implementation of oil- and gas-drilling programs. Wellbore integrity is the primary means to prevent impacts to groundwater. The NDOM is processing a drilling permit which includes fracking. Some of the required conditions of approval are appropriate setbacks for each well site, disclosure of all chemicals to be used in the fracking, cement bond log approval to ensure wellbore integrity and proper containment and disposal of fluids that flow back to the surface.

Chair Ford:

Have you read Mr. Davis's proposed conceptual amendment, [Exhibit X](#)? Is there anything in it that NDOM can accomplish?

Mr. Visher:

With regard to paragraph 1(c) of the proposed conceptual amendment "Procedures for disposal of flowback and produced water during operations," that would be predicated on well operators' proposals. If an operator wanted to dispose of flowback on the surface, the NDOM would not have the authority to regulate that.

Disclosure of frack fluid chemicals is addressed under the NDOM provision requiring operators to use FracFocus. The provision states disclosure must be done after fracking, because we are asking for the amounts of chemicals used. We are talking about large amounts of fluids, mostly water, so the exact amounts of chemicals in it cannot be known until the end of the process.

Chair Ford:

Conceivably, could you ask for the types of chemicals to be used then ascertain the amounts later?

Mr. Visher:

Correct. That is requested on the current permit form. The NDOM would not be involved in the proposed conceptual amendment, paragraph 1(f): "Provision for public involvement." As far as 1 (g), the NDOM already assesses fees to process permits. In accordance with paragraph 3, the NDOM is the sole agency that permits oil, gas and geothermal exploration and operations. If injection or reinjection of fluids is proposed, an underground injection control permit is required from the NDEP.

Chair Ford:

Are you saying the permitting authority is already split?

Mr. Visher:

Correct. In regard to the proposed conceptual amendment, paragraph 4, coordinating our efforts with those of the NDEP is not a problem. We could draft an MOU to allow the agencies to work together on the bill's provisions. We already seek out the expertise of the NDEP on wellbore integrity, because that is the first line of defense in preventing pollution. If wellbores are properly constructed, there is no interaction with fluids or groundwater in the drilling process. Operators are required to keep integrity logs, which we review. When we have concerns and questions, we reach out to the NDEP. If that relationship needs to be better defined in an MOU, that would not be difficult.

Chair Ford:

In geothermal drilling, if water is being reinjected into the ground, does the NDEP have the authority to regulate that? Can we not make an analogy between the geothermal process to fracking's fluid and sand injection?

Mr. Visher:

Fracking is a method of well stimulation to extract additional oil. Senate Bill 390 allows for stimulation methods. Geothermal fluid injection is not for stimulation.

Chair Ford:

In regard to the proposed conceptual amendment, paragraph 2, does the NDOM have the authority to regulate fracking air-pollutant emissions?

Mr. Visher:

Correct. In [Exhibit CC](#), our Exhibit B is a resolution by the Commission on Mineral Resources to add a fracking fluid-disclosure provision to NRS 522. However, Mr. Davis's proposed conceptual amendment, [Exhibit X](#), would negate that action. We would like to withdraw the S.B. 390 fiscal note in [Exhibit CC](#) because we cannot ascertain what the costs would be for the NDOM under the proposed conceptual amendment.

Colleen Cripps, Ph.D. (Administrator, Division of Environmental Protection, State Department of Conservation and Natural Resources):

The NDEP is neutral on S.B. 390 and the proposed conceptual amendment. We have been working since October 2012 with the NDOM, the BLM, Noble Energy, the DCNR and other stakeholders to ensure that adequate protections are in place for fracking. We are also working with the bill's proponents on a workable solution and path forward on its issues.

Senator Goicoechea:

Does the NDEP need this bill to do its job?

Dr. Cripps:

We already have authorities that we could apply to fracking regulation. Perhaps the bill could provide clarification of our duties.

Senator Goicoechea:

I realize that fracking is a relatively new procedure, about which there is a certain amount of paranoia. I could show you 100 dry hole markers in the State; drillers have been operating here all of my life. The State has done a commendable job regulating drilling, so I have faith that the NDEP can properly regulate fracking.

Mr. Walker:

The Chair asked why the NDOM should regulate fracking. There is virtually no probability of groundwater contamination during fracking. Improperly constructed wells are the culprit. Well integrity is dependent upon casing strings in the wellbore, the cement surrounding it and the annularist, the cement volume between the outside of the casing and inside of the borehole. The NDOM already regulates those factors for oil and gas drilling. Construction is the key component to prevent groundwater contamination in vertical, unfracked wells and horizontal wells that may be fracked. The NDOM should be the lead agency in regulating fracking.

Chair Ford:

Do you disagree that the NDEP should play a role?

Mr. Walker:

I might agree with that in regard to air emissions. Ms. Sill claimed that fracking has not occurred in Railroad Valley, but there has been fracking in Nevada since the 1970s. In regard to the proposed conceptual amendment, paragraph 1(f), "Provisions for public involvement," several of us exploring for oil in Nevada were never made aware of S.B. 390 until a few weeks ago. Significant stakeholders have been left out of the process.

The reason that fracking has been limited in Nevada is that our oil reservoirs are extremely high quality. Wells do not need to be fracked. A well in Railroad Valley was the largest-producing oil well in the contiguous United States for many years because the rock was naturally fractured. Only about 2.5 percent of fracking well exploration has been successful. Fracking allows geologists to access unconventional oil reservoirs that are much larger, so it is easier to choose drilling sites.

If the permitting process is made too onerous, companies have told me they will ignore the potential in Nevada. This is one of the most complex geologic settings I have worked in during my worldwide career. I do not understand why

additional permits must be obtained before fracking wells are drilled. Many times, our prognoses are dashed when we drill wells, because we cannot determine the actual geology before drilling. It may well be the case that just a conventional, versus fracked, well is needed because of a high-quality reservoir, or drillers may find water, instead of oil. There are excellent oil reserves in our Chainman Shale.

William J. Ehni (Ehni Enterprises, Incorporated):

You have a copy of my written testimony ([Exhibit EE](#)). I founded my company in Nevada in 1985 primarily to consult with the oil and gas industry. I have been directly involved with the permitting of numerous oil wells, and I can say unequivocally that S.B. 390 and the amendment will hinder exploration in Nevada. The bill will potentially deprive the State of any revenue derived from exploration of oil and gas prospects. Existing rules and regulations for drilling are managed by the NDOM, and they are more than adequate to protect the interests of the State and private property owners. Senate Bill 390 is poorly worded. The actual permitting process should be left solely to the NDOM, which has handled it flawlessly for more than 30 years.

Chair Ford:

Do you disagree with the proposed conceptual amendment, paragraph 2, which states the NDEP should regulate fracking air pollutants?

Mr. Ehni:

The NDEP is already involved in most of that process, which is addressed in the permitting conditions. What scares people about submitting drilling applications is, typically, one must apply to the BLM, to the NDOM and to the NDEP. There have been air-quality issues with the Railroad Valley fracking holes primarily due to dust. Contrary to testimony, there are no potential dangers related to fracking and no known instance of aquifers being damaged or contaminated by it.

The only industry to benefit from fracking regulation is foreign oil production. Fracking will be good for the State and could engender a huge industry. In the first quarter of 2013, Nevada benefitted \$500,000 from oil and gas lease sales. With stringent regulations, all of that money would go away, and we would be left with an expensive agency—the NDEP—regulating a nonexistent industry. Many of today's testifiers are unfamiliar with oil and gas drilling. We need to depend on the NDOM experts for permitting.

John Snow (Commission on Mineral Resources):

I am a petroleum engineer with 35 years of experience and 25 years of experience in oil and gas regulation in Nevada. I represent Nevada on the Interstate Oil and Gas Compact Commission, which developed the proactive FracFocus reporting system with the Ground Water Protection Council. There has not been a single incidence in the Nation of water contaminated by fracking. Wellbore construction from legacy wells have failed in states where such wells are shallow and hundreds of years old.

Thirty-four states produce oil and gas. Nevada is a part of the Interstate Oil and Gas Compact Commission, which has developed model regulations for oil and gas development and protects the rights of citizens and the conservation of oil and gas resources. Twenty-five states allow fracking, so Nevada is not the last state to allow it. We have the benefit of best practices developed in the 25 states, 10 of which use FracFocus for disclosure.

The federal government regulates and permits oil and gas drilling through the BLM. The BLM is nearly 36 months into promulgation of regulations for fracking on public lands. Since 1954, just over 1,000 oil and gas wells have been drilled in Nevada. About 70 of them are now producing, and 95 percent of those are on public land. In the future, a large percentage of unconventional wells that may be fracked will be drilled in the State. They will be regulated by the BLM's fracking rules.

The NDOM permits every producer or injector oil and gas well in the State, whether they are on public or private land. The NDEP has primacy through the EPA's Class II Underground Injection Control Program for the disposal of produced water in the State. Class II is for oil and gas, and Class V is for geothermal. The NDOM and the BLM also permit injection wells. The Commission on Mineral Resources has worked collaboratively with them for years. We should not invoke new rules and regulations that would inhibit oil and gas development and cause companies not to come to Nevada. It would be unprecedented in the Nation to split the well-permitting authority.

Chair Ford:

It has been established that dual permitting regulation is already going on. The NDEP issues air quality and stormwater permits, and the NDOM issues other permits. We are looking at codifying and formalizing the agencies' interaction.

Mr. Snow:

Nevada gets half of the bonus, royalties and rental revenue from oil and gas leases on public land. The funds go to the State Distributive School Account of the General Fund and counties of resource origin. If we create an uncertain and duplicative regulatory environment that serves as a disincentive and restricts development, our school system will suffer.

David C. Fitch, C.P.G.:

I strongly oppose S.B. 390 and proposed conceptual amendment in [Exhibit X](#) because of their duplication of the NRS and the NAC. It will send a message to oil and gas companies, explorers and investors that they need not come to Nevada. Regulation of fracking is currently being handled by the NDOM as the lead permitting agency with the NDEP's assistance. Adding another permit for fracking would be viewed as a delaying tactic.

Randy Henkle (Henkle and Associates):

I am a geologist who represents a small group of royalty holders with interests in royalties where Noble Energy is planning to explore. The proposed conceptual amendment to supplant S.B. 390 is too open ended. Paragraph 1(a) requires "An assessment of the hydrology and geology of the area." The hydrology and geology of the area around the Yucca Mountain Nuclear Waste Repository has been assessed for 30 years. There must be time and financial limits. We do not want to do \$1 billion studies.

Chair Ford:

The proposed amendment is conceptual only, and its terms will be fleshed out.

Mr. Fitch:

Fracking is a nascent industry. In places like Pennsylvania, with its Marcellus Formation shale, and in the Dallas-Fort Worth basin, oil and gas drilling is inadequately regulated. Horizontal wells were drilled in downtown Dallas. There have been very few problems. Look at the amount of potential revenue from fracking for states and the fact that the United States may become energy independent in the next 20 years because of the technology. Just like we give tax breaks to Apple, Incorporated, to come to Reno, we should give fracking companies a regulatory break to get started. If problems develop, we can address them later.

Chair Ford:

Mr. Davis, it seems that all of the provisions except one in your proposed conceptual amendment, [Exhibit X](#), are already in effect. Why do we need this bill?

Mr. Davis:

The NDEP is working with the NDOM on permitting and regulating fracking. It is important to make public policy about the industry given that it is relatively new. The permitting authority does exist, but the proposed conceptual amendment lists specific issues that may not be addressed in the regulatory process without legislation.

I am open to the idea of a two-step permitting process for exploration and the actual fracking. One agency could issue the final permit, but it needs to ensure the other agency is involved. I have talked to the NDEP, the NDOM and Mr. Enos from Noble. In the long run, we want to make sure Nevada has the appropriate and most efficient regulatory structure.

Chair Ford:

We will close the hearing on S.B. 390 and open the hearing on S.B. 399.

SENATE BILL 399: Revises provisions relating to special fuels. (BDR 51-1052)

Sean T. Higgins (Biodiesel of Las Vegas, Incorporated):

Biodiesel of Las Vegas, Incorporated, is the largest manufacturer of biodiesel in the State. You have a copy of a proposed amendment ([Exhibit FF](#)) that seeks to bring the definition of "biodiesel" in line with that of 47 other states. All states, except Idaho and Wisconsin, use the American Society for Testing of Materials standard in their definitions ([Exhibit GG](#)).

The proposed amendment would place biodiesel under the special-fuels definition for taxation purposes. Biodiesel is a fungible product, so the State should make it easy for a Nevada producer to manufacture it for use here and in other states. The definition of "biodiesel" conforming to that of other states would make it easier for manufacturers to comply with regulations. The bill would not lower the manufacturing standards in the existing definition.

Section 2 of S.B. 399 delineates biodiesel as a renewable fuel like liquefied petroleum and compressed natural gas. The bill would not lower the biodiesel

tax rate. It would allow the State Board of Agriculture to regulate taxation of other special fuels, not including biodiesel.

An amendment I have not yet crafted would propose to remove the words "other than biodiesel" in section 1, subsection 1 of S.B. 399. This would ensure the Board of Agriculture would continue to oversee compliance of biodiesel regulations based on its new definition. In S.B. 399, section 1, subsection 3, paragraph (b), subparagraphs (1) and (2) would end with, "or current ASTM standards," because those standards change. A State goal is to help residents move away from fossil fuels toward renewable fuels, and the bill would help enable that.

Senator Goicoechea:

Natural gas and liquefied petroleum are not renewable fuels. Would you call biodiesel blends renewable? Will drivers avoid paying the new tax because their fuel is 90 percent diesel and 10 percent biodiesel? That makes me nervous.

Mr. Higgins:

The Legislative Counsel's Digest for this bill defines renewable fuels as "derived from renewable resources," which biodiesel is.

Senator Goicoechea:

Some biodiesel blends are not renewable fuels and so should not be subject to that tax rate. I am concerned that the bill could be used to avoid paying fuel taxes because drivers are using a 5 percent to 10 percent biodiesel mixture.

Mr. Higgins:

The taxes on biodiesel portion of blends would be 27 cents per gallon.

Senator Goicoechea:

Your amendment would separate out blends and tax them differently, no longer as special fuels, because they are renewable. Is that incorrect? Would you not tax biodiesel at the current 27 cents? Would diesel and biodiesel be taxed differently?

Mr. Higgins:

We believe the two fuels should be taxed differently. The bill would not change the tax rates on diesel, biodiesel or biodiesel blends. It is not intended to allow drivers to avoid paying fuel taxes.

Chair Ford:

The [Exhibit FF](#) amendment's section 3, subsection 2, paragraph (d) reads, "The rate of 27 cents per gallon on the sale or use of Biodiesel; or Biodiesel blend." The previous mention of "(a) Diesel" is gone. Is that part of your concern, Senator Goicoechea?

Senator Goicoechea:

Originally, the bill would tax all three fuels at 27 cents per gallon. By separating out diesel, if Nevada began indexing it, some fuels will not be subject to the tax. If so, we need to define further "Biodiesel blend," so drivers do not use 1 percent biodiesel within diesel to avoid a higher tax.

Chair Ford:

What is the current tax rate on diesel? The rate has been stricken out in the amendment.

Mr. Higgins:

That strikeout is a mistake by the Legislative Counsel Bureau's bill drafters. I will introduce a new amendment.

Senator Settlemeyer:

Other chapters of the NRS than the ones in the bill define fuel tax rates. Would the bill place renewable fuels into a different chapter? If the tax rate for biodiesel blends is changed, how will that break down if 90 percent of a fuel is not renewable? How does that work in the 47 states that use biodiesel?

Wayne Seidel (Administrator, Motor Carrier Division, Department of Motor Vehicles):

Typically, biodiesel is untaxed until it is blended. Then, the entire gallon is taxed at 27 cents. Other states use that differential, because it would be difficult to apportion the tax. The Motor Carrier Division is neutral on [S.B. 399](#), based on the proposed amendment.

Mr. Sande:

When Western States Petroleum Association experts examined [S.B. 399](#), they did not know why the three fuels were separated out from the 27-cent tax rate. Now, I understand that diesel would be reclassified as "special" and taxed at that rate, with biodiesel and biodiesel blends conceivably taxed at lower rates.

The experts suggested that if the fuel definitions change, biodiesel would be entirely different from “renewable” or “biomass” diesel.

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Chair Ford:

We will close the hearing on S.B. 399. Seeing no more business before the Senate Committee on Natural Resources, I adjourn this meeting at 5:29 p.m.

RESPECTFULLY SUBMITTED:

Patricia Devereux,
Committee Secretary

APPROVED BY:

Senator Aaron D. Ford, Chair

DATE: _____

<u>EXHIBITS</u>				
Bill	Exhibit		Witness / Agency	Description
	A	1		Agenda
	B	7		Attendance Roster
	C	17	Jeremy Drew	Presentation: "Nevada Board of Wildlife Commissioners Legislative Update to the Senate Natural Resources Committee"
S.B. 341	D	3	Jason King	Written Testimony
S.B. 468	E	2	Jason King	Written Testimony
S.B. 433	F	4	Alfredo Alonso	Letters of support for S.B. 433
S.B. 433	G	2	Alfredo Alonso	"Sample Owner's Manual Language for Manganese or MMT"
S.B. 433	H	1	Michael D. Hillerby	"Federal Preemption of the Nevada Restriction on Use of Manganese in Gasoline"
S.B. 433	I	9	Michael D. Hillerby	Information packet from the International Council on Clean Transportation.
S.B. 433	J	21	Michael D. Hillerby	"Effect of Organometallic Fuel Additives n Nanoparticle Emissions from a Gasoline Passenger Car"
S.B. 433	K	1	Michael D. Hillerby	Federal Register notice
S.B. 433	L	6	Sean T. Higgins	"Worldwide Fuel Charter September 2006"
S.B. 433	M	14	Sean T. Higgins	Afton Chemical Company "Statement for the Record"

S.B. 433	N	3	Chair Aaron D. Ford	"The Declaration of Brescia on Prevention of the Neurotoxicity of Metals"
S.B. 433	O	14	Alfredo Alonso	"Expected Impact of Lower Production Costs on Gasoline Prices: Nevada and MMT"
S.B. 72	P	2	Michael J. Stewart	Work session document
S.B. 183	Q	5	Michael J. Stewart	Work session document and proposed amendments
S.B. 371	R	5	Michael J. Stewart	Work session document. Mock-up of proposed amendment 7889 and amendment by Beverlee McGrath
S.B. 465	S	1	Michael J. Stewart	Work session document and amendment
S.J.R. 1	T	3	Michael J. Stewart	Work session document and amendments.
S.B. 390	U	14	Senator Tick Segerblom	Presentation: "Hydraulic Fracturing in Nevada: A Commonsense Approach"
S.B. 390	V	2	Kyle Davis	Article: "Noble Energy plans extensive test drilling in Elko County"
S.B. 390	W	1	Kyle Davis	Article: "84,000 gallons of fracking fluid sprays from Fort Collins oil well"
S.B. 390	X	1	Kyle Davis	Proposed language
S.B. 390	Y	6	Jerome P. Walker	Written Testimony
S.B. 390	Z		Paul J. Enos	Video on hydraulic fracturing process
S.B. 390	AA	3	Paul J. Enos	Chart: "Hydraulic Fracturing Fluid Product Component Information"

				Disclosure"
S.B. 390	BB	2	John Sande III	"Fact Sheet: Setting the Record Straight Water and Hydraulic Fracturing in California"
S.B. 390	CC	23	John Sande III	"Monterey Shale: Extraordinary Potential for California and the San Joaquin Valley"
S.B. 390	DD	9	Michael Visher	Information packet
S.B. 390	EE	2	William J. Ehni	Written Testimony
S.B. 399	FF	1	Sean T. Higgins	Proposed amendment
S.B. 399	GG	6	Sean T. Higgins	States' definitions of "biodiesel"