

**MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON NATURAL RESOURCES, AGRICULTURE, AND
MINING**

**Seventy-Fourth Session
April 25, 2007**

The Committee on Natural Resources, Agriculture, and Mining was called to order by Chair Jerry D. Claborn at 1:37 p.m., on Wednesday, April 25, 2007, in Room 3161 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. Copies of the minutes, including the Agenda ([Exhibit A](#)), the Attendance Roster ([Exhibit B](#)), and other substantive exhibits are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at www.leg.state.nv.us/74th/committees/. In addition, copies of the audio record may be purchased through the Legislative Counsel Bureau's Publications Office (email: publications@lcb.state.nv.us; telephone: 775-684-6835).

COMMITTEE MEMBERS PRESENT:

Assemblyman Jerry D. Claborn, Chair
Assemblyman Joseph Hogan, Vice Chair
Assemblyman Kelvin Atkinson
Assemblyman David Bobzien
Assemblyman John C. Carpenter
Assemblyman Pete Goicoechea
Assemblyman Tom Grady
Assemblyman Ruben Kihuen
Assemblyman John W. Marvel
Assemblyman James Ohrenschall
Assemblywoman Debbie Smith

STAFF MEMBERS PRESENT:

Jennifer Ruedy, Committee Policy Analyst
Randy Stephenson, Committee Counsel
Christina van Fosson, Committee Secretary



OTHERS PRESENT:

Michael Stewart, Principal Research Analyst, Research Division,
Legislative Counsel Bureau

Pete Anderson, State Forester, Fire Warden, Division of Forestry

Tom Baker, Capitol City/County Liaison, State and Private Forestry,
United States Forest Service

Chair Claborn:

Meeting called to order. We will open the hearing with
Senate Joint Resolution 11.

Senate Joint Resolution 11: Encourages certain activities relating to the use of
biomass in the production of energy in Nevada. (BDR R-402)

**Michael Stewart, Principal Research Analyst, Research Division,
Legislative Counsel Bureau:**

I am required to disclose that we serve in a nonpartisan staff capacity. We are unable to advocate for the passage or defeat of any legislation. I am here today at the request of Senator Rhodes and on behalf of the Legislative Committee on Public Lands. I have been a staff member along with Randy Stephenson for a long time.

As a review, the Public Lands Committee was statutorily established in the 1983 session of the Nevada Legislature. For the past 25 years it has provided the only formal legislative oversight of the federal government's management of nearly 87 percent of Nevada's land.

You have heard a presentation concerning the Public Lands Committee in the past, so I will not review the details pertaining to their purpose. Over the years the Committee has addressed energy issues. More than ever, during this last interim the Committee discussed energy issues. They have been increasingly focused on the use of biomass as a potential source of energy.

[Read prepared testimony ([Exhibit C](#)).]

Assemblyman Bobzien:

Is there a 60- or 100-second version of what the obstacles to biomass production are at this time? I know we are referring to federal land so there must be several laws that have to be addressed pertaining to the land. Perhaps you could explain to us what we would like the policymakers to do in response to this resolution.

Michael Stewart:

This is an issue that the Public Lands Committee has continuously dealt with. Unfortunately John McLain of Resource Concept is not here today. The people at Resource Concept have done studies on biomass as it relates to piñon-junipers. As you mentioned, unique challenges arise because 87 percent of our land is under federal jurisdiction. By default, our situation requires federal involvement.

Other challenges discussed by the Public Lands Committee pertained to delivery and accessibility issues. It is difficult to get materials on location to process the biomass and then transport it to where it needs to go. Even if the biomass is in close proximity to its destination as the resolution stated, there is an issue with transporting it. There are several obstacles that result from being on federal lands. We are required to obtain permits because of that.

Assemblyman Marvel:

Are they using biomass in Lincoln County?

Michael Stewart:

Yes. In the Fuels for Schools program in White Pine County, they are using the biomass. The biomass is being used in a project to provide fuel energy to one of the elementary schools. Perhaps Mr. Anderson would like to address this issue also.

At the Northern Nevada Correctional Center is a renewable energy center. They were scheduled to launch it this spring. The center would provide heat and power to the institution. There are significant economic benefits. They estimate saving 20 to 30 years off of their budget. That amounts to approximately \$3,000,000 saved from using biomass at the center.

Assemblyman Marvel:

How much reserve do they have?

Michael Stewart:

We probably have to direct that question to the Bureau of Land Management (BLM).

Assemblyman Marvel:

Are they attaining most of it from the Lake Tahoe area?

Michael Stewart:

There are opportunities for that in thinning the forests.

Chair Claborn:

Mr. Stewart, Assemblyman Marvel, and I were on the same committee. We are aware that about three or four years ago they implemented this program and brought it to some of the schools in White Pine County. They mixed the biomass and made pellets which they used to run their heating systems. One of the schools was able to use the benefits of this practice for a pilot program. The program was very successful.

In the Legislative Committee on Public Lands we are attempting to do what Assemblyman Marvel suggested. We are trying to get biomass together and we are trying to motivate the entire community to use it. It is a very cost-effective program that is beneficial to the environment and surrounding wildlife.

Pete Anderson, State Forester, Fire Warden, Division of Forestry:

You are absolutely correct. There are significant opportunities available to us in biomass. Following Norman Elementary School and Ely, the second project is here in Carson City. Ely is currently being fully heated by a cogeneration plant that burns pellets which originated on Mount Wilson in Lincoln County.

The Carson City project involves the Northern Nevada Correctional Center and Stewart Camp, down the street. The scheduled plan is that they will be coming off of the grid July 1, 2007. At that time they will have a 100 percent cogeneration facility on-site. When it is fully functioning it will generate about one kilowatt of electricity. The source of the woody biomass that will go to that boiler consists of a combination of materials. That factor is an important selling point of biomass in general.

It is going to be a source or outlet for our fuel reduction projects, instead of having controlled burns in the field. We will be bringing the biomass down to the plant to generate electricity. It will also divert a tremendous amount of green-stream out of the Carson City landfill. It will extend many years of use to local landfills. It provides a huge monetary savings to the city.

One of the challenges mentioned earlier is the cost of transportation. Getting material out of the Tahoe Basin and down into the valley is an expensive project. This is a fledgling industry. Over time, prices will adjust and we will have more interest from the private sector. We can anticipate their involvement. That is one of the hopes with the tax situation. We can parallel other renewable energy sources such as wind, solar, and geothermal energy in efficiency. That does not currently exist.

Chair Claborn:

I completely agree with you. This is a program that is growing in distinction. It agreeably affects the welfare of all Nevada residents.

Assemblyman Marvel:

Do you have any idea how much reserve we have? How many years can we expect to use the biomass?

Pete Anderson:

There are undoubtedly tremendous resources of federal land. There is currently green-stream and wood, construction waste going directly into our landfills. Those substances are the infrastructure of our future use of biomass for our power plant concept. Biomass issues will be on the forefront of what keeps our plan moving forward because of fluctuating environmental situation lawsuits and land-use decisions involving federal land.

Assemblyman Marvel:

Will this program also help reduce fire hazards?

Pete Anderson:

It absolutely will. It has been increasingly difficult to conduct controlled burns because of our air-quality situation. This is an alternative that makes the most sense. As I previously stated, our challenge is getting that material out of the woods or off the rangelands and into the facility.

The Fuels for Schools program was funded for a couple of years out of the National Fire Plan. But it has been singled out at the federal level along with several other programs of that nature. We are really trying hard to get some cost-share dollars back into Fuels for Schools so that projects like the Van Norman School can get off the ground. We really need that seed money to get the incentive.

Assemblyman Hogan:

I am not as well informed as I would like to be about the process by which you reduce the wood material into something useable in the school program for example. You mentioned pellets and you mentioned construction wood waste. They seem very different. Does everything have to be reduced into pellets or just to a certain size for most of these industrial or school uses?

Pete Anderson:

Yes, the technology and the engineering of the plant itself require a certain sized chip or pellet. The other component is also moisture levels of those chips. So there is a balancing in which we can add water or let chips dry to reach an

optimum combustible state. Then it is conveyed into the plant. Before you leave this Session, perhaps you could come visit the Northern Nevada Correctional Center for a tour. The way it works is quite fascinating.

Assemblyman Ohrenschall:

Can the biomass be collected without harming habitat or wildlife? Can it be done noninvasively?

Pete Anderson:

The projects vary in composition and treatment. When the ground is level, it is less complicated to use mechanized equipment. For example, a whole tree harvester or a brush hog, as it is referred to, can literally reduce the material into chip form, and blow it right into a container of some kind that can be transported out of the woods. In the higher country, like in the state parks or Environmental Integrity Project (EIP) programs in Tahoe, a lot of it is handwork. In those cases we use inmate crews from our Division to go out and treat the ground or the material by hand with chainsaws, stacking it. That is one of the ongoing challenges. How do you get a larger piece of equipment or a larger container into the woods? We are trying to do as much as we can, as close to the treatment area as possible. It is an ongoing challenge to do in an environmentally sound way.

Chair Claborn:

At one time or another when we were on the Legislative Committee on Public Lands, there was a PowerPoint program that demonstrated that to us. It would have been very interesting to allow the Committee to see how that works. It separates some of the underbrush which makes the trees grow quicker because they get more sunlight. It also cleans up fire hazards. It is quite effective for fire-hazard prevention. It is good all around. The PowerPoint really showed a lot of good things that I wish this Committee could see.

Michael Stewart:

We have that as a stored exhibit with the Legislative Committee on Public Lands. We have had several presentations over time. The one you are probably referring to is from John McLain of Resource Concepts. He showed photographs of the piñon-junipers and how the ground was not sustainable for any other plant or animal life. I can provide the Committee with that exhibit.

Chair Claborn:

I would appreciate that very much. That would be very helpful.

Assemblyman Goicoechea:

David E. Norman Middle School is working very well. If it were not for this program, an already financially strained school district would be paying a great deal more money. On the other side of this issue, we need to understand that even today the Forest Service has numerous, large controlled burns in which they are reducing biomass in eastern Nevada. It is a tremendous waste. Essentially we need to figure out how we can harvest the piñon-juniper in an affordable manner and get this program running. We have 6,000 acres scheduled on the Ruby Mountains, and that is going up in smoke.

Assemblyman Marvel:

Do you remember Resource Concepts came up with a chipboard process that they were using some of this biomass for. Has that taken off of the ground yet?

Pete Anderson:

In the southern parts of our country, where they have more of a plantation atmosphere with the rainfall to support such an agricultural climate, chipboard is a huge component of the economy. It is utilized in practically every component of building construction.

Assemblyman Marvel:

It is a very attractive building material.

Pete Anderson:

The exciting part is that the piñon-juniper functions very well as chipboard. It is simply a matter of establishing an infrastructure and the private sector's interest.

Tom Baker, Capitol City/County Liaison, State and Private Forestry, United States Forest Service:

Mr. Anderson and I have been working very closely on some piñon-juniper samples. They are taken through the products lab to see what kinds of products can be developed and used from them. We have also looked at Tamarisk and other trees and shrubs. We are exploring what we can do to create marketable products out of them. Trex and other similar products were originally developed by the products lab.

Part of our problem in many open forest areas is that once you get into high mountain regions, practically the only way to treat wood waste is, unfortunately, with fire. The reason for this is the cost of transportation and the availability of industries, businesses, or cogeneration projects to utilize wood-waste material.

I would like to acknowledge the Nevada Division of Forestry. Since their partnership with the Forest Service, they have done wonderful work together. The Fuels for Schools project in White Pine County exists largely because of the Nevada Division of Forestry's work. The Carson City Renewable Resources project also deserves distinction. Their foundation has brought forth the cogeneration project at Nevada State Prison. Their accomplishments have been remarkable.

Assemblyman Marvel:

Please indicate what the potential fiscal savings might be using the biomass. It must be more cost-efficient than the fuels we are currently using.

Pete Anderson:

Yes. In the David Norman School, there was a significant savings in the very first year, which was compounded because of the cost of heating soared so much. In the Department of Corrections project, they are looking at well over \$1,000,000 per year in savings to the State of Nevada.

Assemblyman Marvel:

Utilities are one of our largest expenses for prisons.

Pete Anderson:

The other large opportunity that Tom mentioned we are working on is close observation of Indian Springs. We have a huge fuel issue on the Spring Mountain Range. We are trying to determine how to expedite a similar operation there. The high desert, southern Nevada desert, and the correctional center are all together. We potentially have the colossal opportunity to conduct a similar project in the south.

Assemblyman Goicoechea:

It is accessible.

Vice Chair Hogan:

The resolution requests that we widely publicize the availability and benefits of biomass. It appears that the proximity of the Spring Mountain Forests and the correctional institutions are an opportunity to have a good alternative energy source. We also have to opportunity to influence 2,000,000 taxpayers who might not otherwise be thinking in terms of open land and forests. This could be a very worthwhile endeavor. We could generate a great deal of interest in the south.

Chair Claborn:

Thank you, Vice Chair Hogan. Your statements are correct. Since I see no further questions or comments on this bill, the hearing on S.J.R. 11 is closed. We are adjourned [2:01 p.m.].

[Senate Concurrent Resolution 3 was not heard.]

RESPECTFULLY SUBMITTED:

Christina van Fosson
Committee Secretary

APPROVED BY:

Assemblyman Jerry D. Claborn, Chair

DATE: _____

EXHIBITS

Committee Name: Committee on Natural Resources, Agriculture,
and Mining

Date: April 25, 2007

Time of Meeting: 1:37 p.m.

Bill	Exhibit	Witness / Agency	Description
	A		Agenda
	B		Attendance Roster
<u>S.J.R. 11</u>	C	Michael Stewart, Research Division, Legislative Counsel Bureau	Prepared Testimony