## SENATE COMMITTEE ON AGRICULTURE AND NATURAL RESOURCES

January 28, 1999 Hearing Room 50

4:30 P.M. Tapes 22 - 23

**MEMBERS PRESENT: Sen. Gary George, Chair** 

Sen. Thomas Wilde, Vice-Chair Sen. Tony Corcoran Sen. Ted Ferrioli Sen. Bill Fisher Sen. John Lim

**MEMBER EXCUSED: Sen. Joan Dukes** 

STAFF PRESENT: Brad Harper, Administrator

Kristal Hatton-Nease, Administrative Support

**ISSUES HEARD: Environmental Stewardship** 

Fred Otley, Oregon Cattlemenís Association

Sustainable Forestry and Energy

- Marc Rappaport ñ Sustainable Energy Development
- Dr. Art Wisevogel National Renewable Energy Lab
- Mike Grainey ñ Oregon Department of Energy

These minutes are in compliance with Senate and House Rules. Only text enclosed in quotation marks reports a speakeris exact words. For complete contents, please refer to the tapes.

TAPE/#	Speaker	Comments
TAPE 22, A		

005	Chair George	Opens committee meeting at 4:33 p.m.
Environme	ental Stewardship	
020	Fred Otley	Oregon Cattlemenís Association. Begins slide presentation on stream disturbances of various stream areas in Oregon.
072	Otley	Continues discussing slide pictures.
101	Sen. Corcoran	Asks if the stream in the picture is listed.
104	Otley	Answers no and only because there is no data.
118	Otley	Continues discussing slide projections. Discusses adaptive management system.
188	Otley	Discusses natural disturbances of streams included in the slide presentation.
225	Otley	Comments on riparian habitats and research of E-type streams.
294	Chair George	Asks if Oregon is still going to be able to produce good crops of grass and still protect the streams.
299	Otley	Answers yes. Explains why he is opposed to a grazing management practice act.
321	Chair George	Discusses a farm bureau meeting he attended and says ongoing research is needed.
350	Otley	Comments on new streambed standards. [Recording equipment cut out].
364	Chair George	Recesses committee at 4:57 p.m.
369	Chair George	Reconvenes meeting at 5:42 p.m.
Sustainabl	e Forestry and Energy	n
379	Marc Rappaport	Sustainable Energy Development. Gives credentials. Discusses biotechnology research. Comments on providing other means of dealing with waste from logging, forest management, and agriculture residues. Explains problems for foresters in land management in astern Oregon. Comments on renewable fuel sources. Urges committee to consider using new technology. Discusses supporting documents in <b>[EXHIBIT A].</b>

TAPE 23	<b>A</b>	
086	Chair George	Comments on the ethanol diagram on page 8 of the exhibit. Asks if the facility is operational.
089	Rappaport	Answers it is not operational.
094	Sen. Ferrioli	Comments on how many cubic feet of biomass will be sold in this region.
134	Rappaport	Explains the forest service appears to not be able to get a contract beyond two years. Says co-generation question is Ö
163	Sen. Ferrioli	Says the scientific argument about reduction of fuels and fire reduction is present.
178	Dr. Art Wisevogel	National Renewable Energy Lab (Golden, Colorado). Submits <b>[EXHIBIT B]</b> and discusses ethanol used as a fuel. Says over one billion gallons of ethanol are produced in the U.S. annually and blended with gasoline. Adds there were 107 billions gallons of U.S. gasoline sales in 1997.
239	Wisevogel	Says over 55% of the petroleum used in gasoline comes from foreign sources. Describes local ethanol use. Says the current west coast total is 131 million GPY.
297	Wisevogel	Explains the composition of cellulosic biomass. Describes corn-to-ethanol technology and the technology for ethanol production.
360	Wisevogel	Explains the biomass-to-ethanol technology concentrated acid.
TAPE 22	, B	
039	Wisevogel	Explains the biomass-to-ethanol technology dilute acid and the biomass-to- ethanol technology pretreatment/enzyme. Gives a summary of U.S. ethanol deployment projects.
098	Wisevogel	Continues discussing ethanol projects at BCI and Arkenol Companies in California. Adds information on projects at Sealaska Corporation (Alaska) and on the Collens Project in Northern California.
140	Wisevogel	Comments on the Buffalo Creek Fire in Denver, CO. Says it is working the forest service to conduct thinning studies. Says similar projects are going on in Montana and North Dakota.
186	Chair George	Asks what product is left after the biomass is made.

191	Wisevogel	Responds there are three major co-products: CO2, ethanol, and ligna. Says ligna has the potential to be made into other things.
227	Wisevogel	Says Bob Dettemen frame the Rocky Mountain region has been coordinating several studies. Adds a lot has to do with Forest Service politics and how each forester has control over his domain.
254	Rappaport	Says he has had conversations with people at region 6 and explained technology to Peggy Kane. Says there is better communication and new approaches in the Forest Service. Appreciates support form legislature.
307	Chair George	Comments on range management.
320	Rappaport	Discusses Forest Residue Utilization Committee. Comments on a visit to a large ranch in Hood River several years ago.
335	Sen. Fisher	Says ethanol has had some devastating effects on the car engines.
346	Wisevogel	Comments on tighter regulations on gas storage tanks. Says ethanol has helped cars to keep water out of the fuel system. Adds there was a problem with methanol corroding rubber and plastic engine parts.
377	Rappaport	Discusses Baylor University's center for engine certification. Says it is busy certifying gas engines to run on ethanol as an aviation gas and proving the long term viability of ethanol as a fuel source.
407	Chair George	[Recording equipment cut out.]
420	Wisevogel	Answers it can be used.
TAPE 23	, B	
020	Rappaport	Comments on the conversion to ethanol.
027	Wisevogel	Says it usually takes nine months to one year to conduct feasibility studies.
047	Rappaport	Says Biomass in Medford has been recycling waste ash to mulch and says the soil shows better water retention.
066	Mike Grainey	Assistant Director, Oregon Office of Energy. Says the Oregon Office of Energy is available as resources on these issues. Submits [EXHIBIT C].
099	Sen. Wilde	Comments on alternative fuel vehicles. Asks what is being done to cities doing

		nothing
118	Grainey	Says the Oregon Office of Energy does not have regulatory authority.
137	Sen. Wilde	Says everyone knows the alternative fuel vehicles are available yet no one purchases one. Asks why people are not using the tax credit.
148	Grainey	Replies the tax credit for alternative fuels continues through 2001. Individuals purchasing them are eligible for the credit, Says they have been purchased by companies and public sector fleets in Oregon. Comments on legislation lasts session, which gave tax credits to people to change fuel in their homes.
176	Sen. Wilde	Says he has not seen home fueling as an advantage.
179	Grainey	Says over 20,000 Oregonians have received tax credits for using solar energy.
184	L	Questions and answers between Sen. Fisher and Grainey about the form natural gas take when it is compressed.
205	Chair George	Asks if ethanol enhances diesel fuel burning.
209	Grainey	Says he will need to get back to the chair on that.
224	Sen. Lim	Comments it looks like the Oregon Office of Energy is running the program and not looking at the future. Says he hopes there is a vision for the future.
261	Sen. Wilde	Comments on new buses being fueled by natural gas. Says this technology is being used in the city of Ashland. Adds Ashlandís motor fleet has exceed more than 400.
277	Sen. Fisher	Asks why the windmills on Columbia bluff taken down.
283	Grainey	Responds the windmills were for data gathering. Explains there were some problems and controversy about them.
297	Sen. Fisher	Comments he used them as a gauge when flying.
302	Chair George	Adjourns meeting at 7:00 p.m.

Kristal Hatton-Nease, Brad Harper,

Administrative Support Administrator

## EXHIBIT SUMMARY

- A ñ Written testimony and supporting documents, Marc Rappaport, 64 pp.
- B ñ Written testimony, Dr. Art Wisevogel, 21 pp.
- C ñ Office of Energy Overview, Mike Grainey, 8 pp.
- D ñ Office of Energy Brochures, Mike Grainey, 18 pp.