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## FISCAL IMPACT REPORT

SPONSOR: Adair DATE TYPED: 2/24/03 HB \_\_\_\_\_  
 SHORT TITLE: Salt Cedar Biomass for Electric Generation SB 769  
 ANALYST: Maloy

### APPROPRIATION

Appropriation Contained		Estimated Additional Impact		Recurring or Non-Rec	Fund Affected
FY03	FY04	FY03	FY04		
	\$300.0		\$180.0	Non-Recurring	General Fund
			See Narrative		

Relates to HB146

### SOURCES OF INFORMATION

Responses Received From  
 Environment Department  
 Energy, Minerals and Natural Resources  
 Department of Agriculture  
 State Land Office  
 Interstate Stream Commission

#### Synopsis of Bill

Senate Bill 769 appropriates \$300,000 from the general fund to the Energy, Minerals and Natural Resources Department for expenditure in fiscal year 2004 for the Forestry Division to assess the feasibility of using biomass from salt cedar and other undesirable woody vegetation removal and watershed restoration projects to generate electric power. The projects are to include:

1. an inventory of the supply of undesirable woody vegetation such as salt cedar, Russian olive, pinon and juniper on land that needs clearing and restoration to native plant species in the Middle Rio Grande Valley, the Pecos River Valley and the northern upland rangelands;
2. cooperation and consultation with federal, state, local and nonprofit organizations to implement the action plan; and
3. preparation of an interdisciplinary action plan to remove undesirable woody species to enhance water quality and quantity, restoration of native plant species and wildlife habitat, promote fire prevention in the bosque, promote local industry and improve the environment.

Significant Issues

1. The bill addresses the need to assess the volume of woody material that could be feasible to remove for use in electrical generation power plants. To offset the construction and operation costs, the mill proponents will need a 20 to 25 year commitment of wood supply. The bill directs the creation of an interdisciplinary action plan. The bill calls for the project to include cooperation with federal, state, local and nonprofit organizations to implement the action plan.
2. There are a number of issues associated with this bill. Interpretation of the phrase “feasibility of using biomass from salt cedar and other undesirable woody vegetation removal and watershed restoration projects to generate electric power” could be challenging. Assessing the feasibility of watershed restoration projects would focus on various types of labor and equipment to conduct the work.
3. Assessing the feasibility of using that material for electrical power generation would require in-depth research on the numerous existing technologies for generating electricity. These technologies have significantly different fuel performance requirements, woody material consumption schedules and widely divergent generation efficiencies. There are electrical generation plants that operate using small logs, chipped wood, compressed chips, or only clean chips.
4. The term undesirable woody vegetation has the possibility of diverse interpretations that will impact the accuracy of the feasibility study. Many people do not believe pinon and juniper trees to be undesirable. The result is that gross measures of standing tree volumes will not assure long-term availability of materials to run the electrical generation plant.
5. Small electrical generation plants that are in the 3-4 megawatt range work more economically for biomass projects unless a very large source of biomass is secured. The study would need to determine which size of power plant is most viable.
6. A complete assessment would require a review of siting issues for a power plant. That study could cost approximately \$150,000 based on the siting studies for wind systems that EMNRD just completed. Generating plant locations need to consider access to large power lines, water rights, air quality and transportation corridors for the wood and generating equipment.
7. Wholesale prices for electricity generated from coal are usually lower than the cost of generating electricity from biomass. To be economically viable, the operator would have to rely on incentives such as the ones being proposed. House Bill 146 that proposes an energy production incentive of 1 cent per kWh for biomass projects that produce electricity.
8. The feasibility study would be complicated by the need for a power generating plant to work with a utility company to purchase power. The cost of power supplied to the utility would need to be at a lower cost, or be of higher value, for the utility to purchase. The wind-turbine generation project has encountered resistance from rural electric cooperatives to contract for their power.

9. The bill requires the Department to cooperate and consult with federal, state, local and nonprofit organizations to implement an action plan. The federal agencies have planning and environmental clearance requirements that need significant lead times.

### **PERFORMANCE IMPLICATIONS**

If electrical power generation stations are built that use material from thinning projects as the result of this study, the Forestry Division's ability to protect communities from wildfire would be enhanced. Existing restoration projects would also be enhanced if a market were established for the residues of thinning.

### **FISCAL IMPLICATIONS**

The \$300.0 appropriation in the bill would be a non-recurring appropriation from the general fund. Any unexpended or unencumbered monies at the end of FY04 will revert to the general fund.

According to the Energy, Minerals and Natural Resources Department, the appropriation will not be sufficient to provide reliable data and a successful implementation plan. The Forestry Division estimates an additional \$180.0 will be needed as well as an additional year to accomplish the implementation and data gathering.

### **ADMINISTRATIVE IMPLICATIONS**

The Energy, Minerals and Natural Resources Department will require additional personnel and an extended period to accomplish the study. The Department will also require an FTE to conduct the environmental analysis to assess volumes and assure the removal operations do not create erosion, or impact wildlife. Also, another FTE will be needed to manage the assessment of the feasibility of various electrical generation stations. A third FTE will be needed to manage the consultation and implementation of the action plan; this FTE would also work on assessing the willingness of landowners to allow material to be removed from their land. The action plan will take an additional year to complete.

### **TECHNICAL ISSUES**

The bill does not specify the size or type of electric power generation technology to be researched and assessed.

The extent of the Middle Rio Grande Valley, the Pecos River Valley and the upper northern rangelands is not defined, leaving to interpretation the precise acreage to be inventoried.

### **OTHER SUBSTANTIVE ISSUES:**

According to the Interstate Stream Commission, this project could result in a plan that will aid in:

- Fire Prevention in the Bosque,
- Enhancement of water quality and quantity,
- Restoration of native plant species and wildlife habitats, and

- Promotion and growth in local industry.

**AMENDMENTS**

The Energy, Minerals and Natural Resources Department recommends the following amendments:

Line 17 should be amended to read: “Four hundred and eighty thousand dollars (\$480,000) and three (3) FTE”

Lines 19 and 20 should be amended to read: “for expenditure in fiscal years 2004 and 2005”

**SJM/njw**