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FISCAL IMPACT REPORT

ORIGINAL DATE 2/8/06

SPONSOR King LAST UPDATED _____ HB 847

SHORT TITLE Water Model Programs SB _____

ANALYST Hoffmann

APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Non-Rec	Fund Affected
FY06	FY07		
	\$150.0	Recurring	General Fund

(Parenthesis () Indicate Expenditure Decreases)

Relates to HB131, SB662, HB848, and Senate Capital Outlay Request 269.

SOURCES OF INFORMATION

LFC Files

Responses Received From

Office of the State Engineer (OSE)

Department of Finance and Administration (DFA)

No Response From

Environment Department (ED)

SUMMARY

Synopsis of Bill

House Bill 847 appropriates \$150,000 to the Department of Finance and Administration to contract with a national research laboratory in Bernalillo County (Sandia National Laboratories) with expertise in water modeling. The appropriation would be distributed as follows: (A) \$75,000 to develop a water model for the Estancia Basin, and (B) \$75,000 to develop a water model for the Salt Basin.

FISCAL IMPLICATIONS

The appropriation of \$150,000 contained in this bill is a recurring expense to the general fund. Any unexpended or unencumbered balance remaining at the end of fiscal year 2007 shall revert to the general fund.

SIGNIFICANT ISSUES

The following information was provided by the Office of the State Engineer (OSE).

It is unclear why the proposed projects are required - groundwater flow models have already been developed for both the Estancia and Salt basins in recent years.

The OSE adapted an existing groundwater flow model of the Estancia basin developed by a private consultant to evaluate potential hydrologic effects of water rights applications. The model has provided the foundation for OSE administration of the basin under criteria and guidelines established in 2002. A consultant recently developed a groundwater flow model of the Salt basin for the Interstate Stream Commission (ISC).

In addition to the OSE Estancia Model, Sandia National Laboratories has previously conducted dynamic simulation modeling of the Estancia basin. Dynamic simulation models may be useful for planning and public education purposes but the utility of these types of models for water resources administration is uncertain. It is unclear whether the water modeling proposed in the bill will improve upon, compliment or duplicate previous modeling efforts.

The ISC indicates that Sandia National Laboratories is already doing work in the Salt basin for a client and will not share that information with the state even though the work is funded through gross receipts tax rebates. It is unclear whether the Lab will be doing more proprietary work with this funding. The ISC has stressed that all work performed should be made available to the public, and that any reference to the Salt basin should be stricken from this bill.

The OSE/ISC would appreciate the opportunity to assist in the coordination of activities under this bill because the projects have the potential to improve water resource planning and administration. As noted the OSE already utilizes and maintains a groundwater flow model for administration of the Estancia basin, and the ISC has a groundwater flow model of the Salt basin.

CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP

There are four bills that have a purpose related to the Salt Basin distribution in House Bill 847.

- Senate Capital Outlay Request 269 appropriates \$100,000,000 to plan; design; acquire property, water rights and rights of way; and construct facilities to transfer water from the Salt Basin to communities in New Mexico.
- Senate Bill 662 creates the “Salt basin water development fund” in the Interstate Stream Commission and appropriates \$100,000,000 to the fund to develop the water resources of the salt basin in southern New Mexico.
- House Bill 175 appropriates \$300,000,000 from the general fund to the Interstate Stream

Commission to plan, design, and construct a distribution system for water from the Salt Basin.

- House Bill 131/HACS appropriates \$150,000 to the Interstate Stream Commission to assess options to put Salt basin water to beneficial use.

House Bill 848 appropriates \$50,000 to begin implementation by Torrance County of the Estancia Basin regional water plan.

TECHNICAL ISSUES

The Office of the State Engineer provided the following information.

The use of “water model program” is unclear. The word “program” should be deleted.

The Office of the State Engineer (OSE) and Interstate Stream Commission (ISC) staff includes groundwater flow modelers, and the agency also cooperates with the U. S. Geological Survey (USGS) in model development. The agency may also use professional modeling consultants for model development. The models developed include three-dimensional finite difference models - the standard accepted by professionals. These models generally are capable of handling a wide array of water supply and water resource administration issues. It is unclear why the proposed projects will be required.

The OSE plans to update the recently completed Estancia basin model as necessary. Water level data are collected by the agency and will be used to adjust the model if required. Models developed must withstand professional scrutiny as they may be challenged in court.

A number of applications have been filed to appropriate groundwater from the Salt basin. The OSE will consider the ISC model but may revise this model or develop a new one as necessary.

The OSE is also conducting a water level measuring program in the Salt basin. The OSE ran into some resistance last year from the Lab’s client when we attempted to collect water level data from their wells. All data and work products from the project should be made available to the public.

OTHER SUBSTANTIVE ISSUES

The Office of the State Engineer notes that because the “water model program” is not specified, it is uncertain whether the level of funding proposed is appropriate. In recent discussions with the OSE\ISC, Sandia National Laboratories has indicated the availability of matching funds for dynamic simulation modeling in New Mexico. It is unknown if the proposed appropriation would be matched by such federal funding.

CH/mt