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FISCAL IMPACT REPORT

SPONSOR	Cervantes	ORIGINAL DATE LAST UPDATED		IB 979
SHORT TITL	E Ground Water Inj	ection Credits & Depleti	ons S	SB
			ANALYS	ST Aubel

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY07	FY08	FY09	3 Year Total Cost	Recurring or Non-Rec	Fund Affected
Total		.01			Recurring	See narrative

(Parenthesis () Indicate Expenditure Decreases)

SOURCES OF INFORMATION

LFC Files

<u>Responses Received From</u> Office of the State Engineer (OSE) Energy, Minerals and Natural Resources Department (EMNRD) New Mexico Environment Department (NMED)

No Response

This FIR will be updated upon receipt of pending response from the Office of Attorney General.

SUMMARY

Synopsis of Bill

Section 1 one of the bill amends 72-5A-1 to specifically reference Chapter 72, Article 5A NMSA 1978 as the "Ground Water Storage and Recovery Act" (Act).

Section 2 would add four new sections to the Ground Water Storage and Recovery Act:

Section A declares that a person possessing a ground water diversion right shall have the right to inject water into the aquifer from which the water is pumped to offset depletions to the aquifer caused by the pumping, subject to the injected water meeting water quality standards established by the Environment Department (NMED), and provided that NMED approves a water quality monitoring plan.

Section B states that the state engineer shall grant a credit against aquifer depletions in the

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amount determined to have been recharged, if the injected water meets NMED water quality standards and NMED has approved the water quality plan, and if the water "serves to recharge the aquifer."

Section C would require the person seeking to recharge the aquifer to obtain a permit from the state engineer, and states the state engineer shall issue a permit after publication and notice if the recharge will not impair existing water rights, be contrary to the conservation of water, or be detrimental to the public welfare.

Section D states the person applying to recharge the aquifer shall install meters as required by OSE.

FISCAL IMPLICATIONS

While no significant fiscal implications were noted by the responding agencies, the administrative impact to OSE of additional permitting responsibilities and monitoring would be likely. HB 979 does not specify a permit fee, which would be one option to offset any additional recurring operating cost.

SIGNIFICANT ISSUES

HB 979 proposes a new section to the Ground Water Storage and Recovery Act (GWSRA) to enable private parties a right to credits for offsetting their groundwater pumping by injecting water into the same aquifer. The agency responses appear to conflict regarding this ability to use credits regarding groundwater:

EMNRD Response

Under present law, an appropriator of surface water has a statutory right, subject to approval of the State Engineer, and subject to deductions for evaporation and seepage, to deliver water to a ditch, stream or watercourse and to take in exchange, above or below the delivery point, an equivalent amount of water, as measured by devices installed at the direction of the State Engineer, and obtain credit against the quantitative limits of his water right for the amount of water returned (NMSA 1978 Section 72-5-26). <u>An</u> appropriator of groundwater, however, does not have that right. Pursuant to holdings of the New Mexico Supreme Court,¹ unless otherwise provided by statute, any water that returns to an aquifer, however it gets there, becomes public water, and its return to the aquifer does not increase the maximum amount that any holder of a water right can withdraw.

OSE Response

The provisions of this Act appear to be codification of the State Engineer's existing administrative practices for recognizing return flow credits for permitted groundwater rights specific to the injection of water to offset depletions to the aquifer. Return flow

¹ State ex rel. Reynolds v. King, 63 NM 425, 321 P2d 200 (Sup 1958); Kelley v. Carlsbad Irrigation Dist., 76 NM 466, 415 P2d 849 (Sup 1966)

credits are used to reduce or remedy the impacts from pumping.

Under existing procedures, applicants may file an application to appropriate or transfer water rights and include a request for return flow credit. If these applications are approved, the permit will require the submittal of a return flow plan demonstrating return flow prior to rendering an approval of the plan. Applicants may request a return flow credit from injection of treated wastewater to offset impacts from diverting water from their wells.

On January 31, 2005, the state engineer created rules for administering surface water offset (return flow) credits in the Rules and Regulations Governing the Appropriation and Use of the Surface Waters of New Mexico and is currently in the process of developing rules for administering offset (return flow) credits to an underground source.

Response from NMED

The GWSRA allows governmental entities, defined as Indian nations, tribes or pueblos or state political subdivisions, including municipalities, counties, acequias, irrigation districts or conservancy districts, to construct and operate projects for the storage and recovery of groundwater. A number of New Mexico municipalities have expressed interest in injecting surface waters and treated effluent from wastewater treatment plants into underground aquifers for subsequent withdrawal as a future source of drinking water. Those groundwater recharge, storage, and recovery projects have the potential to reduce the rate at which groundwater levels will decline, and may prevent overstressing or depleting aquifer systems, promote conservation of water within the state, serve the public welfare of the state; and may lead to more effective use of the state's water resources.

A second point for clarification appears to center on the permitting process. One issue is whether such injection plans would require both a discharge plan and well permit plans (from NMED) pursuant to the Water Quality Act and the federal Safe Drinking Water Act:

NMED Response

Injecting fluids into underground aquifers is an activity that is also subject to the Underground Injection Control (UIC) program pursuant to the Safe Drinking Water Act. The State of New Mexico has primacy from the U.S. Environmental Protection Agency for implementing this program within New Mexico. For non-oilfield activities, the federally-delegated UIC program is implemented by NMED pursuant to the New Mexico Water Quality Act and New Mexico Water Quality Control Commission (WQCC) regulations. Accordingly, groundwater management injection wells are considered Class V injection wells and also require permits under WQCC regulations. Those regulations protect the quality of all groundwater in New Mexico that has an existing concentration of 10,000 mg/l or less TDS, for present and potential future use as domestic and agricultural water supply.

Another permitting issue entails whether injection permitting under the Section 2.C would suffice, or whether a change in purpose and place of using the existing water for the new recharge purpose would also be required (Article 5 and Article 12). EMRD asserts that the Act

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should include a clarification that a recharge permit requires separation compliances with requirements of existing statute regarding change in place and purpose of use of existing rights for the water used for recharge.

A third permitting issue is pointed out by OSE:

The primary purpose and benefit of a permit under the Ground Water Storage and Recovery Act is to allow an entity to create a reserve pool of water underground that may be stored and subsequently pumped as needed to meet short and long-term demands.

The process of applying for a permit under the ground water storage and recovery act is a complicated process (which is necessary to deal with issues that are particular to such a complicated project). It may not be beneficial to require an applicant requesting offset (return flow) credit to fall under the same application and permitting requirements.

This act might be more appropriately a new section of the groundwater code at Chapter 72, Section 12.

PERFORMANCE IMPLICATIONS

Currently, NMED does not have any WQCC permit applications for direct injection of water or wastewater into underground aquifers. NMED maintains that the permit issues for these types of applications are highly technical and take extensive staff review in order to ensure protection of public health. It is not known if this will result in a significant increase in injection permit applications. If enactment of HB 979 resulted in a significant increase in injection permit applications, it could affect overall NMED performance in processing of discharge permits.

ADMINISTRATIVE IMPLICATIONS

Additional OSE staff time will be required to implement and review injection credit applications.

TECHNICAL ISSUES

NMED Response

In Subsections A and B of proposed new Section 2, the right to inject is based upon the water meeting standards adopted by the NMED and NMED approving a water quality monitoring plan. NMED does not adopt water quality standards. Pursuant to the Water Quality Act, water quality standards are adopted by the WQCC. In addition, as stated in Significant Issues above, a WQCC permit, issued by NMED, is also required to protect groundwater quality. WQCC permits contain a variety of operational, monitoring and reporting conditions. A water quality monitoring plan is only one element of WQCC permits and therefore including only this condition conflicts with existing regulations and laws.

OSE points out a misspelling on page 1, line 11: "enating" should be "enacting."

OTHER SUBSTANTIVE ISSUES

EMNRD questions whether the Act grants greater freedom to private parties than to governmental entities regulated under the GWSRA as follows:

HB 979 proposes a new section to the Ground Water Storage and Recovery Act (GWSRA) to enable private parties a right to credits to offset their groundwater pumping by injecting water into the same aquifer. However, unlike the governmental entities regulated by the GWSRA, private entities would not be required to provide, nor to abide by, a monitoring plan approved and periodically reviewed by the State Engineer to assure existing hydrologic conditions are maintained, and would not be subject to cancellation of a permit if the monitoring plan reveals a problem with the injection system. Additionally, there are no provisions allowing the State Engineer to make deductions for seepage and evaporative losses, loss of aquifer pressure, migration of injected water or other variables that may affect the extent to which a credit should be allowed. In effect, the bill would give private parties greater freedom and latitude to engage in groundwater injection than governmental entities regulated under the GWSRA.

EMNRD also expressed additional concern regarding the lack of any requirement for an ongoing monitoring plan, as follows:

Although approval by the Environment Department is required involving the quality of the water to be injected, as well as approval of a water quality plan, the lack of any requirement for an ongoing monitoring plan to be approved and regularly reviewed by the State Engineer, submission of reports by the injector, opportunity to cancel the permit if hydrologic conditions change, and lack of any standards for evaluating whether a credit can be granted depending on variable hydrologic factors would tie the hands of the State Engineer to grant the credit without being able to take those considerations into account..

Of further concern is that the State Engineer must grant the credit "if the water serves to recharge the aquifer." Because the bill is silent as to how that will be shown, the issue of whether injected water actually reaches the aquifer will be subject to different interpretations, leading to possible litigation between the injector and the State Engineer. The bill should, instead provide for the injector to file with, and obtain approval by, the State Engineer of regular reports as a condition for a permit allowing injection to be made. The provision in Section 2.D requiring the installation of meters is not sufficient. Groundwater monitoring wells spaced at regular intervals is the accepted way to monitor groundwater levels, but these are not required by the bill.

Agencies requested clarification on the following terms and qualifications: Definitions for "water"; qualifications for "water discharge", "injections" (e.g., any pressure requirements), water source for injection; and whether the "right to discharge (Section 2, Subsection C) is the same as "the right to inject" (Subsection A).

ALTERNATIVES

OSE Response

One alternative is use current existing statutory authority, which are adequate for the

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State Engineer to permit credits for offsets (return flow) under current state engineer administrative practices and his rules and regulations.

Another option is to enact these provisions as a separate Act under the Groundwater Act.

WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL

NMED Response

Aquifer re-injection projects would continue to be implemented under existing statutes and regulations and there may be some lack of clarity in what injection projects qualify as aquifer recharge projects

EMNRD Response

Appropriators of groundwater will not be allowed to return water to an aquifer for credit against withdrawals allowed by their water rights, except as provided in existing law with respect to permitted ground water storage and recovery projects.

AMENDMENTS

NMED suggests the following amendments to address the technical issues the agency raised:

- 1. All of the language on page 2, lines 3-5, of Subsection A of new Section 2, should be deleted. It should be replaced with "the injection activities meet the regulations and standards adopted by the New Mexico Water Quality Control Commission pursuant to the Water Quality Act."
- 2. All of the language on page 2, lines 10-13, of Subsection B of new Section 2, should be deleted. It should be replaced with:

"(1) the injection activities meet the regulations and standards adopted by the New Mexico Water Quality Control Commission pursuant to the Water Quality Act."

3. Item "(3)" of Subsection B of new Section 2 on line 14 of page 2 should be renumbered "(2)".

MA/mt