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FISCAL IMPACT REPORT

ORIGINAL DATE 1-25-09
LAST UPDATED 2-13-09 **HB** 19/aHAGC/aHENRC

SPONSOR Stewart

SHORT TITLE State Engineer Aquifer Jurisdiction **SB**

ANALYST Woods

APPROPRIATION (dollars in thousands)

| Appropriation | | Recurring or Non-Rec | Fund Affected |
|---------------|------|-------------------------|------------------|
| FY09 | FY10 | | |
| NFI | NFI | | |

(Parenthesis () Indicate Expenditure Decreases)

Duplicates, Relates to, Conflicts with, Companion to N/A

SOURCES OF INFORMATION

LFC Files

Responses Received From

Office of the State Engineer (OSE)
 Energy, Minerals and Natural Resources Department (EMNRD)
 Attorney General's Office (AGO)
 New Mexico Environment Department (NMED)

SUMMARY

Synopsis of HENRC Amendment

House Energy and Natural Resources Committee amendment to HB19, as amended, adds emergency language to the legislation.

SIGNIFICANT ISSUES

Office of the State Engineer notes that the amendment to HB19 would make the bill effective immediately upon passage and approval by the Governor instead of the usual 90 days after the session, which would be June 19, 2009. OSE further states:

In 2006, the development of the waters provided for at NMSA 1978, Sections 72-12-25 thru 28 for municipal and domestic uses as the source of water for new subdivision development attracted the attention of the media and a single Legislator. In 2007 notices of intent to appropriate total 24,000 acre feet, and legislative efforts to amend the law to give the state greater control over these waters failed in 2007 Legislature.

By the 2008 Legislative Session the notices of intent totaled 40,000 acre feet; and again efforts to amend the law failed. At this point in the 2009 Legislative Session, notices of intent total over 400,000 acre feet. New notices continue to be filed in anticipation of HB 19 being enacted. If enacted without an emergency clause, the number of notices simply will increase until its effective date and any water rights established by actual beneficial use may be subject to limited state jurisdiction.¹

Synopsis of HAGC Amendment

House Agriculture and Water Resource Committee amendment to House Bill 19 clarifies Section 72-12-25(A) NMSA 1978. Section A of the bill now provides that an undeclared underground water basin below two thousand five hundred feet from ground surface and which contains only nonpotable water, is subject to state engineer administration in accordance with Sections 71-12-25 through 72-12-28 NMSA 1978.²

SIGNIFICANT ISSUES

OSE indicates that the proposed amendments to HB 19 address the concerns expressed by the AGO in its response that the language in Section 72-12-25(A) of the original bill can “be read to take away the state engineer’s authority over potable water in existing underground water basins simply because the basin “includes” deep nonpotable water within its boundaries.” These amendments were developed by the LCS working in conjunction with the AGO and the OSE specifically to eliminate any interpretation that the State Engineer’s authority over potable water might be affected by the bill. As amended, Section 72-12-25(A) would provide that undeclared underground water basins that consist entirely of deep nonpotable water would continue to remain subject to the provisions of Section 72-12-25 through 72-12-28 NMSA 1978. Once the State Engineer declares as an underground water basin such a deep nonpotable aquifer then the uses enumerated in B(1) would continue to be subject to 71-12-25 through 72-12-28 NMSA 1978 while under B(2) all other uses of nonpotable water would be subject to Sections 72-12-1 through 72-12-24 NMSA 1978.

AGO states, “The amendment resolves the AGO’s ‘significant issues’ in our earlier analysis.”

NMED notes that HB 19 as amended by HAGC maintains authority over appropriations of water from aquifers that are at a depth of 2,500 feet or more below the ground surface for oil and gas exploration and production, prospecting, mining, road construction, agriculture, generation of electricity, use in an industrial process or geothermal pursuant to NMSA 1978, Sections 72-12-25 through 72-12-28. These uses remain exempt from the requirements of NMSA 1978, Sections 72-12-1 through 72-12-24, which apply to all other uses of water. Further that:

The New Mexico Water Quality Act and its attendant regulations require the control of discharges to any groundwater aquifer that has a dissolved solids concentration of 10,000 parts per million or less, with no restriction on depth of the aquifer. However, deep aquifers often have a higher mineral concentration than 10,000 parts per million dissolved solids. As water supplies in New Mexico become more scarce, it may be prudent to provide authority under the Water Quality Act to control discharges to

¹ OSE response dated 2-10-09.

² AGO response dated 1-3-09.

aquifers that contain a higher dissolved solids concentration than 10,000 parts per million in order to maximize the potential for these water resources to be treated and put to use.

EMNRD also indicates that the committee amendment clarifies the status of potable (less than 1,000 ppm TDS) water in aquifers that (1) are encountered at depths below 2,500 feet, and (2) contain water that is potable in some locations and non-potable in others. Further that:

- Section 72-12-25, as it currently reads, excludes from the State Engineer’s permitting jurisdiction aquifers encountered below 2,500 feet that “contain potable water.” This provision is perhaps ambiguous, but is certainly subject to a construction allowing appropriation of water (potable or non-potable) without a State Engineer permit if that water is found in a deep aquifer where the water is non-potable in some places. Indeed that would seem to be the interpretation most consistent with the statute’s literal language.
- The original bill subjected water in aquifers to which Section 72-12-25 applied to State Engineer permitting jurisdiction only for some purposes (most obviously municipal and subdivision uses) and not for others (oil and gas, mining, road construction, industrial, agriculture and geothermal). But it did not change the definition of aquifers to which the section applied. Thus, under the original bill, it was still arguable, if not clear, that water (potable or non-potable) in a deep aquifer that, in some places, contains non-potable water, could be appropriated for some uses without a State Engineer permit.
- The amendment, by limiting the operation of Section 72-12-25 to aquifers containing only non-potable water, resolves this ambiguity. Under the amended bill, if the State Engineer declares a basin consisting of a deep aquifer that contains only non-potable water, then appropriation of water in that aquifer requires a State Engineer permit for municipal or subdivision uses, but not for most other uses. However, the bill repeals the clause prohibiting the State Engineer from declaring a basin that is or includes a deep aquifer that “contains non-potable water.” Thus, if the amended bill is passed, and the State Engineer declares a basin consisting of an aquifer that contains both potable and non-potable water, Section 72-12-25, as amended by the bill, will not apply to that aquifer, and appropriation from that aquifer for any use will require a State Engineer permit, just as is the case for appropriations from shallower aquifers.

EMNRD concludes that “There will remain, of course, the possibility of factual uncertainty as to whether a particular aquifer contains only non-potable water,” and that As originally drafted, HB 19 applied to deep aquifers containing non-potable water. It did not provide that the aquifer contain only non-potable water. This would allow the Office of the State Engineer (OSE) to determine that the aquifer was subject to Section 72-12-25 NMSA based on the quality of the water at the point of withdrawal. Limiting HB 19 to deep aquifers containing only non-potable water may create difficulties for the OSE to determine if a basin is subject to Section 72-12-25, NMSA 1978.

Synopsis of Original Bill

House Bill 19 seeks to extend the State Engineer's authority to administer nonpotable underground water by amending Section 72-12-25 NMSA 1978 to allow the State Engineer to declare as an underground water basin any aquifer the top of which is 2,500 feet or more below the ground surface and which contains nonpotable water. Purposes of use for oil and gas exploration and production, prospecting, mining, road construction, agriculture, generation of electricity, use in an industrial process, or geothermal use would remain subject to the provisions of Sections 72-12-25 through 72-12-28 NMSA 1978, but appropriations of water for all other purposes of use would be subject to requirements of the general groundwater code, in Sections 72-12-1 through 72-12-24 NMSA 1978, specifically the state engineer's application, permit, and licensing process. There is no appropriation attached to this legislation.

SIGNIFICANT ISSUES

OSE indicates that, currently, Sections 72-12-25 through 72-12-28 NMSA 1978 limit the State Engineer's jurisdiction over the appropriation of groundwater from deep saline aquifers. This bill would allow the State Engineer to declare such deep saline aquifers as underground water basins. Thereafter, the State Engineer would have jurisdiction to regulate the appropriation of groundwater from any declared deep saline aquifer for all purposes of use except purposes of use for oil and gas exploration and production, prospecting, mining, road construction, agriculture, generation of electricity, use in an industrial process. This is necessary because of the growing interest in the use of deep saline aquifers as new sources of supply, especially for domestic and municipal purposes of use, spurred by increasing demand for potable water and recent improvements in desalination technology. Because the State's future population may rely upon water from these deep saline aquifers, it is incumbent upon the State to require the State Engineer to exercise his expertise to evaluate the water supply to be appropriated to provide water for future population growth in the State to ensure is reliable, even if finite, to sustain the population to meet the county requirements. Further, that this legislation is the product of extensive discussions with the representatives of various industries, including NMOGA, and an earlier version of this bill was unanimously approved and endorsed at the Interim Water Committee's November 2008 meeting. OSE adds that, "This bill will not affect the disposition of produced water from the exploration for or production of oil and gas under the jurisdiction of the Oil Conservation Division of EMNRD pursuant to Paragraph (15) of Subsection B of Section 70-2-12 NMSA 1978 and Section 70-2-12.1 NMSA 1978."

EMNRD adds that the State Engineer does not have authority to declare water basins including deep aquifers containing non-potable water. Non-potable water is useable water, though, and its appropriation should be regulated. In addition, technological advances make it possible to treat non-potable water to make it potable. To protect this useable and potentially potable water, the jurisdiction of the State Engineer should be expanded. NMED notes, "The New Mexico Water Quality Act and its attendant regulations require the control of discharges to any groundwater aquifer that has a dissolved solids concentration of 10,000 parts per million or less, with no restriction on depth of the aquifer. However, deep aquifers often have a higher mineral concentration than 10,000 parts per million dissolved solids. As water supplies in New Mexico become more scarce, it may be prudent to provide authority under the Water Quality Act to control discharges to aquifers that contain a higher dissolved solids concentration than 10,000 parts per million in order to maximize the potential for these water resources to be treated and put to use."

However, the Attorney General's Office suggests that House Bill 19 is internally inconsistent in

that the bill appears to intend to give the state engineer authority to declare underground water basins which include deep, nonpotable waters.³ The state engineer currently has very little authority over deep, nonpotable waters. However, Section A provides that when the state engineer declares a basin that “includes” deep, nonpotable water, that basin “is subject to state engineer administration in accordance with Section 72-12-25 through 72-12-28 NMSA 1978. The state engineer has no authority to “administer” under these Sections. The only authority these sections give him is the authority to require that pertinent data for each well be filed and to require that such wells be metered and the amount of water produced and an analysis of the water be reported quarterly. Thus it appears that the state engineer not only does not gain any authority to administer nonpotable water but that, by declaring a basin under this bill, he could unintentionally divest himself of existing authority to administer potable water. Section A can even be read to take away the state engineer’s authority over potable water in existing underground water basins simply because the basin “includes” deep nonpotable water within its boundaries. The AGO states:

Section B, on the other hand, provides that if the state engineer declares an underground water basin that includes deep, nonpotable water the water appropriated from that basin is subject to two different statutory processes depending upon what that water is intended to be used for. This is apparently true whether or not that water is potable or nonpotable water because of the problem noted in Section A above.

Section B(1) provides that water which is intended for oil and gas exploration and production, prospecting, mining, road construction, agriculture, generation of electricity, use in an industrial process or geothermal use “shall remain” subject to Sections 72-12-25 through 72-12-28. The term “shall remain” indicates that the intent is that Section B (1) is intended to apply only to deep, nonpotable water. However, read in conjunction with Section A, Section B(1) can be read to include potable water over which the state engineer currently has jurisdiction if it is used for the listed purposes. This results in a net loss of existing regulatory authority over potable water in declared basins.

Section B(2) provides that all other uses not listed in Section B(1) shall be subject to Sections 72-12-1 through 72-12-24.

Finally, the Association of Commerce and Industry (ACI) comments that the authority and regulations we have now are working fine. There is nothing unique about saline water below 2500 feet that should require additional authority be given to the State Engineer. ACI notes that the state has lost some \$400.0 thousand in revenue as a result of the drop in oil and natural gas prices. Additional revenues were lost, even during high prices, due to decreasing rigs drilling in New Mexico and to decreasing reserves. “It never makes sense to pile expensive and unnecessary expenses on an industry, and even less sense in the current economic climate. Especially when that industry is the one that provides about 27 percent of the revenue to the general fund.”

ACI adds that the legislation will hurt oil and gas operators because the cost of drilling wells will be significantly increased. Also it will cause operators to be regulated by two agencies which will lead to conflicts. There is no need to make a change because the Oil Conservation Division has over 50 years experience regulating the industry. There has been a steady increase in the

³ The Attorney General response carries the disclaimer: *This analysis is neither a formal Attorney General’s Opinion nor an Attorney General’s Advisory Opinion letter. This is a staff analysis in response to the agency’s, committee’s or legislator’s request.*

number and severity of regulations over that time period. For most of those years the industry has been required to cement in the ground a water protection string of casing. ACI concluded by noting that, “We normally set the water protection casing at about 400 to 600 feet, depending on the deepest fresh water to be protected.” As background, ACI includes the following data:

- The current cost of casing to 600 feet is about \$42/foot or \$25,200.
- A new Basin at 3000 feet would require stronger casing at \$90/foot or \$273,360.
- The cost of drilling the hole is \$15,000/day and the current surface hole is drilled in a day.
- At 3000 feet drilling time will go to 6 days or an additional \$75,000.
- The cost of setting and cementing the casing will go from \$30,000 to about \$50,000.
- The total additional cost for each well will be \$398,360.

PERFORMANCE IMPLICATIONS

OSE indicates that this legislation would improve the State Engineer's performance by allowing him to exercise his general supervision of all groundwater of the State of New Mexico, including non-potable water in aquifers that are deeper than 2,500 feet. By bringing those waters under the State Engineer's jurisdiction, the State Engineer can apply existing administrative processes to appropriations of water to evaluate and administer applications to appropriate water in these deeper aquifers for purposes of use related to protecting the public's health, welfare, and safety. This would result in more consistent, efficient and effective administration and protection of groundwater across the state.

EMNRD adds that there will be no performance implications for the department. Under the Oil and Gas Act, the OCD regulates the disposition of produced water (see Section 70-2-12.1 NMSA) and the disposition of water produced or used in connection with drilling for or producing oil or gas (see Section 70-2-12(B)(15) NMSA 1978). HB 19 does not conflict with the statutory grant of jurisdiction to the OCD because it addresses the appropriation of water, rather than the disposition of water. Wells drilled for the purpose of generating water will be subject to HB 19 because that is an appropriation. Wells drilled for oil and gas may produce water as a by-product, but such “produced water” is not considered an appropriation.

ADMINISTRATIVE IMPLICATIONS

OSE indicates that the legislation could lead to a small increase in the number of applications to the State Engineer for permits to appropriate groundwater. This would result in some additional administrative duties related to increased record keeping, processing of permit applications and administration of permits.

WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL

OSE advises that the existing limitations on the State Engineer's authority to declare underground water basins will allow entities to continue drilling wells for non-potable water in deep aquifers by filing a Notice of Intention to Drill, and to appropriate such underground water without benefit of a permit from the State Engineer for purposes of use related to protecting the public's health, welfare, and safety. These underground water basins, while potentially large, may have a finite supply of water that is not recharged. There are potentially grave risks to public safety by allowing future population growth based upon a non-sustainable, limited supply

of water. Significant uncertainty also exists regarding the connection of these aquifers to other fully appropriated water sources, whose water users may potentially be impaired by appropriations from these aquifers. Further, if large quantities of water are pumped from these deep aquifers, land subsidence may also occur, raising a significant risk of infrastructure damage.

AMENDMENTS:

None suggested.

BW/svb:mt