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FISCAL IMPACT REPORT

SPONSOR <u>Muñoz/Stefanics</u>	LAST UPDATED _____
	ORIGINAL DATE <u>2/15/2025</u>
SHORT TITLE <u>Brackish Water Projects Funding</u>	BILL
	NUMBER <u>Senate Bill 342</u>
	ANALYST <u>Davidson</u>

APPROPRIATION* (dollars in thousands)

FY25	FY26	Recurring or Nonrecurring	Fund Affected
	\$50,000.0	Nonrecurring	General Fund
	\$16,000.0	Nonrecurring	General Fund
	\$4,000.0	Nonrecurring	General Fund

Parentheses () indicate expenditure decreases.
*Amounts reflect most recent analysis of this legislation.

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT* (dollars in thousands)

Agency/Program	FY25	FY26	FY27	3 Year Total Cost	Recurring or Nonrecurring	Fund Affected
NMED	No fiscal impact	\$342.5	\$342.5	\$685.0	Recurring	General Fund
OSE	No fiscal impact	\$300.0	\$300.0	\$600.0	Recurring	General Fund
Total	No fiscal impact	\$642.5	\$642.5	\$1,285.0		General Fund

Parentheses () indicate expenditure decreases.
*Amounts reflect most recent analysis of this legislation.

Relates to an appropriation in the General Appropriation Act
Relates and Conflicts with House Bill 137

Sources of Information

LFC Files

Agency Analysis Received From

New Mexico Institute of Mining and Technology (NMIMT)
Office of the State Engineer (OSE)
New Mexico Environment Department (NMED)
University of New Mexico (UNM)
New Mexico State University (NMSU)

SUMMARY

Synopsis of Senate Bill 342

Senate Bill 342 appropriates \$50 million from the general fund to Office of the State Engineer (OSE) for the purpose of planning, designing, and administering funds for brackish water project use, exploration, treatment, and aquifer characterization.

Senate Bill 342 also appropriates \$16 million from the general fund to the New Mexico Institute of Mining and Technology (NMIMT) for the purpose of researching, monitoring, and supporting the development of technology associated with water projects related to aquifer monitoring and improved groundwater characterization.

Senate Bill 342 also appropriates \$4 million from the general fund to New Mexico State University (NMSU) for the purpose of researching, monitoring, and supporting the development of technology associated with brackish water projects.

Senate Bill 342 required the New Mexico Environment Department (NMED) promulgate rules for the use of naturally occurring brackish water for aforementioned water projects by December 31, 2026.

This bill does not contain an effective date and, as a result, would go into effect 90 days after the Legislature adjourns if enacted, or June 20, 2025.

FISCAL IMPLICATIONS

The combined appropriation of \$70 million contained in this bill is a nonrecurring expense to the general fund. Any unexpended or unencumbered balances remaining at the end of FY30 shall revert to the general fund.

Analysis from the New Mexico Environment Department (NMED) notes the Water Quality Control Commission (WQCC), a quasi-independent commission within the agency, promulgates rules relating to and enforcing of the Water Quality Act. NMED analysis estimates the promulgation of new brackish water regulations could increase the workload of the commission and the agency, requiring an additional two personnel for a total of \$280 thousand in recurring funding. Additionally, NMED notes an additional \$125 thousand would be needed to fund efforts to pay for outreach, advisory committee activities, public engagement, public notes, a hearing officer, stenographer, and Spanish language interpretation. The analysis notes all these costs are required by state law and/or rule.

Analysis from Office of the State Engineer (OSE) notes implementation of the bill could require the agency to need an additional \$300 thousand in recurring funding for two additional personnel.

SIGNIFICANT ISSUES

Brackish Water. Current state statute, which mirrors the United States Geological Survey

(USGS), defines brackish water as water which has a total dissolved solids (TDS) level of 1,000 to 10,000. Further, OSE characterizes water which has a TDS level above 1,000 and is located deeper than 2,500 feet below the surface as deep non-potable water. This characterization is due to the water which is shallower than the deep non-potable water being “righted,” meaning it has potential for beneficial use, regardless of its level of salinity.

Deeper reserves of groundwater typically have TDS levels of 35 to 200 thousand and are therefore currently not used or characterized as righted water sources for beneficial use. If an entity plans to drill into these deeper aquifers, they must notify OSE, who does not technically own the water right of his entity but is the arbiter of the water.¹

Analysis from the New Mexico Bureau of Geology and Minerals Resources notes brackish water in deep, confined aquifers is typically not a renewable resource. Bureau analysis further notes these reservoirs of groundwater cannot be replaced due to the common collapse of the aquifer pore spaces which held the water. Regarding the pumping of shallower brackish water reservoirs, sufficient hydrologic studies are necessary prior to extraction.

Analysis from the bureau notes recovery of usable brackish water is between 40 to 90 percent, based on the source salinity and treatment technique. Additionally, disposal of the remaining brine concentrate requires specialized technical handling. Typical disposal of brine solutions in inland areas is done with specialized Class 1 or Class V wells, similar to ones deployed at El Paso’s Kay Bailey Hutchinson Brackish Water Desalination Facility. Disposal of brine concentrate there is done in a Class 1 well connected to a shallow formation found and utilized through extensive hydrologic studies to determine capacity and safety.

Currently, research is underway to develop techniques to separate useful salts as salable products, but it remains prohibitively costly and is not widely used. Currently, the state has one desalination plant in Alamogordo (see Attachment 1 for graphic of desalination plant), which is also home to the Brackish Groundwater National Desalination Research Facility.

Agency Analysis. NMIMT notes the Water Quality Control Commission (WQCC) already has guidelines and rules on water quality and reuse related to shallow brackish water. NMIMT analysis further notes OSE already provides guidelines for regulating the development of deep, non-potable groundwater greater than 1,000 TDS as well. NMIMT analysis further notes the bill could consider adding references to the state’s Water Data Act and require any data collected regarding the efforts related to the bill so the data can be available and accessible.

Analysis from the University of New Mexico (UNM) notes the funds outlined in the bill align with Energized Watershed projects and notes the funds in the bill align with current work done at OSE related to desalination.

NMED notes provisions of the bill:

Could create confusion and implementation issues for NMED to promulgate brackish water use rules outside of the scope of the Water Quality Act, as a central element of the Water Quality Act is to prevent or abate water pollution in New Mexico and inappropriate use of brackish water could cause water pollution. Furthermore, the broad

¹ https://geoinfo.nmt.edu/publications/periodicals/earthmatters/15/n2/em_v15_n2.pdf

language around “use of brackish water” would impose significant challenges for NMED in rulemaking due to the wide range of possible uses and varying environmental and public health considerations associated with each individual potential use.

CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP

NMIMT notes the bills \$16 million appropriation to it related to aquifer characterization is duplicative of the \$19 million contained within the LFC’s proposed House Bill 2 and the \$28.75 million in the executive recommendation.

UNM notes Senate Bill 342 conflicts with House Bill 137 due to House Bill 137 creating the strategic water supply fund, which has language that closely mirrors the language used in Senate Bill 342 related to brackish water projects. Passage of both bills could be duplicative and could impact implementation.

AMENDMENTS

Analysis from NMIMT recommends changes to language in the bill;

Page 2, line 1: Suggest adding “deep” to definition of brackish water to better align with other water bills and definitions.

Page 2, line 21: add “aquifer characterization” before innovation.

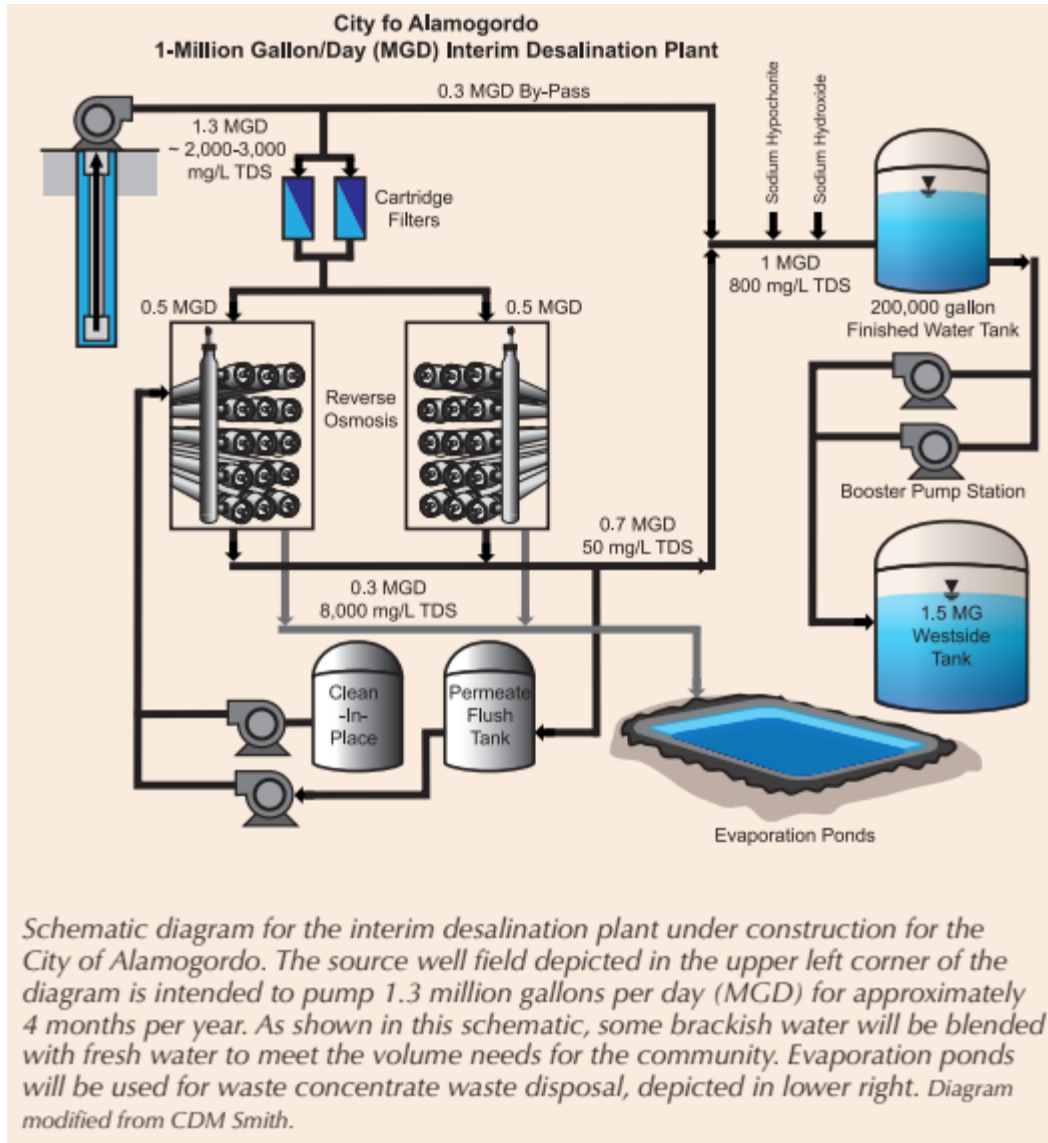
Page 2, line 22: delete “technology associated with

AD/rl

Attachments:

1. City of Alamogordo Desalination Plant

Attachment 1.



Schematic diagram for the interim desalination plant under construction for the City of Alamogordo. The source well field depicted in the upper left corner of the diagram is intended to pump 1.3 million gallons per day (MGD) for approximately 4 months per year. As shown in this schematic, some brackish water will be blended with fresh water to meet the volume needs for the community. Evaporation ponds will be used for waste concentrate waste disposal, depicted in lower right. Diagram modified from CDM Smith.

Source: [New Mexico](#) Bureau of Geology and Mineral Resources Earth Matters