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NEW MEXICO'S GREENBELT LAW: DISINCENTIVIZING WATER CONSERVATION THROUGH AGRICULTURAL TAX BREAKS

ABSTRACT

New Mexico passed a Greenbelt law (N.M. Stat. § 7-36-20) in 1967 offering tax subsidies to agricultural landowners. The law represents a disconnect between land and water policy in that it has serious water policy implications but has never been discussed accordingly. We estimate that in 2020, Rio Grande surface flows were used to irrigate 4,388 acres of land in Bernalillo County, the state's largest urban area, that received the agricultural valuation. This represents an estimated water use of nearly 11,000 acre-feet, on many properties not utilizing the program as originally intended, in a region where agriculture is largely non-commercial. This is equivalent to nearly a quarter of the county's entire 2020 municipal water use, enough for approximately 40,000 homes. The Greenbelt law lacks cooperative oversight, and no system exists to track its water usage. The law is not accomplishing what it was originally enacted to accomplish, and multiple attempts to update it have been unsuccessful. Re-thinking institutional arrangements is critical to improving water resilience in an era of increasing aridification and unreliable water supplies.

INTRODUCTION

Bernalillo County's urbanizing population nearly quadrupled from 1940 to 1970.¹ This growth and shift in demand for land placed increasing upward pressure

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1. U.S. DEP'T COM., 16TH CENSUS OF THE UNITED STATES: 1940 696 (1940) [hereinafter U.S. DEP'T COM. 1940] (Bernalillo County population 69,391 and 51% urban); U.S. DEP'T COM., 1970 CENSUS OF POPULATION Pt. 33, P.13 [hereinafter U.S. DEP'T COM. 1970] (Bernalillo County population 315,774 and 94.2% urban).

on property values. In 1967, New Mexico enacted *N.M. Statutes Section 7-36-20: special method of valuation; land used primarily for agricultural purposes*.² This established a means of easing the property tax burden on farmers, effectively functioning as a tax subsidy or exemption.³ However, the law very loosely defined “agricultural use” as the mere production of agricultural products or the “resting of land to maintain its capacity to produce agricultural product.”⁴ This in turn was broadly defined as “plants, crops, trees, forest products” and other similar output, without a requirement that such items must be used for commercial purposes.⁵ It was a statewide law, but perhaps held particular implications for Bernalillo County, home to Albuquerque and its expanding peri-urban fringe.⁶

Almost immediately after the law was passed, criticism arose.⁷ As published in the *Natural Resources Journal* in 1968, University of New Mexico law student James Griffin highlighted issues in the statute like absence of accountability, lack of enforcement and penalty systems, and low qualification standards.⁸ Griffin recognized the difficulty in interpreting a landowner’s intent when applying for the program, and urged changes be considered to what was referred to as the “Greenbelt law,” writing the following:

The distinction made by the Greenbelt law between agricultural and non-agricultural lands and the resulting assessed valuation are important items on which many tax dollars depend. The law is not intended to inadvertently subsidize the land speculator or developer. Bernalillo County officials admit there is nothing to prevent this from occurring.⁹

Five decades after Griffin’s warning, it is worth revisiting the state law and looking at how the program is playing out today in a climate-altered world. There are more years with less snowpack in river headwaters; snowmelt and runoff are occurring earlier in the year as temperatures rise; and drier soil is causing more runoff to be absorbed before hitting mainstem rivers.¹⁰ These effects can be clearly seen in the Rio Grande, which bisects Bernalillo County north to south through the center of Albuquerque.¹¹ What do we do? One response is to ensure this law is functioning in

2. N.M. STAT. ANN. § 7-36-20 (2021).

3. *Id.*

4. *Id.*

5. *Id.*

6. *Id.* “Peri-urban” refers to the area immediately surrounding a city or town, see “peri-urban”, MERRIAM-WEBSTER, <https://perma.cc/E77N-QHGW> (last visited Dec. 10, 2022).

7. See, e.g., James D. Griffin, *Land Use Planning—New Mexico’s Green Belt Law: N.M. Stat. Ann §§72-2-14.1 to 14.4 (Supp. 1976)*, 8 NAT. RES. J. 190 (1968).

8. *Id.*

9. *Id.* at 193.

10. U.S. BUREAU RECLAMATION, WATER RELIABILITY IN THE WEST - 2021 SECURE WATER ACT REPORT 3, 15, 20 (2021).

11. Brittany Peterson & Suman Naishadham, *The Rio Grande Went Dry in Albuquerque for First Time in 40 Years. A Key Fish Habitat Went with It*, USA TODAY, <https://perma.cc/FG89-9G8E> (Aug. 4, 2022, 12:40 PM).

a way that is consonant with the current climate situation. The objective of this study is to analyze the often-called “Greenbelt” law, its local institutional arrangements and water usage. This special method of valuation for agricultural land (henceforth “agricultural valuation,” and also commonly referred to as “special valuation” and “special use valuation”) illustrates a disconnect between land policy and water policy, which has been a point of land management research in recent years.¹² Though written strictly in terms of tax law, it creates an incentive for water use.¹³ In 2020, we estimate up to 10,970 acre-feet of Rio Grande surface water flows were used to irrigate 4,388 acres of Bernalillo County land that received the agricultural valuation.¹⁴ This irrigated agriculture is predominately non-commercial.¹⁵

New Mexico is in a unique position regarding water use. It is constrained by interstate and international compacts, water rights in the Middle Rio Grande Basin (“MRGB” or “Middle Basin”) are not adjudicated, agencies along the river disagree regarding water accounting,¹⁶ and a major water user in the basin—the Middle Rio Grande Conservancy District (“MRGCD” or “the District”)—has a complicated 100-year institutional history.¹⁷ These factors lead to a baseline lack of transparency and disputable water use accounting before even considering the agricultural valuation, which does not require consumptive water use tracking.¹⁸ The County reports that it tracks the tax program but not related water usage, and the District reports that it manages irrigation but does not consider the tax program.

Agricultural history and culture in New Mexico are rich and contribute a broad array of human and social values to the state. In some areas of the middle basin (especially in Bernalillo County) these contributions are predominately non-market values and are thus not easily quantifiable.¹⁹

This law has water policy implications but was constructed—and is managed—solely as tax policy.²⁰ Irrigation seasons have become strained, with large stretches of the Rio Grande south of Albuquerque drying completely for months each

12. See generally Sarah Bates, *Bridging the Governance Gap: Emerging Strategies to Integrate Water and Land Use Planning*, 52 NAT. RES. J. 61 (2012).

13. The claim that the Greenbelt law creates an inadvertent incentive for significant water use by offering a tax break in exchange for irrigating land will be explored over the course of the paper.

14. See *infra* note 111.

15. U.S. DEP’T AGRIC., 2017 CENSUS VOLUME 1, CHAPTER 2: COUNTY LEVEL DATA (follow Table 4, Net Cash Farm Income of the Operations and Producers: 2017 and 2012, Page 260). This category shows Bernalillo County’s negative net cash farm income for 2017 and 2012.

16. Reed Benson, *Opinion analysis: Court sides with New Mexico over Texas in interstate water dispute*, SCOTUSBLOG (Dec. 17, 2020, 10:01 AM), <https://perma.cc/KP5A-6Z2A>.

17. The MRGCD was formed as a public corporation. For historical discussion see M. BRIAN McDONALD ET AL., CASE STUDIES IN THE DEVELOPMENT OF NEW MEXICO WATER RESOURCES INSTITUTIONS: THE MIDDLE RIO GRANDE CONSERVANCY DISTRICT AND URBAN WATER PRICING 3–30. (1981); Middle Rio Grande Conservancy District Water Policies Plan (C.T. Dumars & S. C. Nunn, Eds., MRGCD Board of Directors, Working Document, 1993) [hereinafter Conservancy District Water Policies Plan].

18. N.M. STAT. ANN. § 7-36-20 (2021). There is no language in the statute regarding water use or tracking.

19. TYLER HOLMES & RHONDA SKAGGS, ECONOMIC IMPACT OF AGRICULTURE IN THE SOUTHERN ALBUQUERQUE, NEW MEXICO METROPOLITAN AREA 2 (2014).

20. The Greenbelt law is nested within the taxation section of state statutes and does not reference water.

year.²¹ The MRGCD must stagger water diversion times to stretch supplies out longer, and has ramped up fallowing programs, paying out at higher prices and requiring less acreage to do so than in prior seasons.²² We cannot depend on the same level of snowmelt runoff as has occurred historically because aridification is leading to a more varied and less reliable supply.²³ Every effort must be undertaken to maintain future resiliency for the state—including property tax law, when pertinent.

I. BACKGROUND

A. Illustrative Vignette

To help illustrate the context of this law in Bernalillo County, consider a property currently benefiting from an agricultural assessment: the land of an estate in the affluent Village of Los Ranchos was regularly assessed by the county in 2020 to be worth \$2.7 million.²⁴ However, because of the Greenbelt law, the estate paid \$9,800 in property taxes instead of \$44,000.²⁵ Of the full property area, the MRGCD reported irrigating 14 acres containing trees, hay and vegetables in 2020.²⁶ Estimated consumptive water use of that land was 35 acre-feet, which is enough to support around 100 households in the county for a full year.²⁷ That water usage directly supported the land’s agricultural valuation eligibility.

B. Greenbelt History and New Mexico’s Statute

Greenbelt laws were introduced across the US in the aftermath of the Great Depression and Dust Bowl, which were devastating to both commercial and subsistence agriculture.²⁸ A surge in urbanization followed the country’s recovery.²⁹ Greenbelt programs can be used to contain urban sprawl, protect air quality and facilitate recreation, as well as maintain agricultural land, by utilizing tools like conservation easements, zoning regulations or development restrictions.³⁰ These laws can be particularly useful in states with non-commercial agriculture and mixed rural-urban areas such as central New Mexico’s Middle Rio Grande Basin, which in

21. *River Eyes Geospatial Data*, U.S. GEOLOGICAL SURV., <https://webapps.usgs.gov/MRGESCP/data/river-eyes> (last visited Dec. 10, 2022).

22. Theresa Davis, *Emergency Program Pays Farmers to Fallow Fields*, ALBUQUERQUE J., <https://perma.cc/9SVP-YEGR> (Mar. 21, 2022, 12:02 AM).

23. BUREAU RECLAMATION, *supra* note 10.

24. *Infra* note 111. For full land value, see *Final_Intersection_Data.xlsx*, tab “vignette properties” (on file with lead author).

25. *Id.*

26. *Id.* For crop codes, see cells N2–4 and tab “Crop codes.”

27. Harding and McCord, *infra* note 127; for formula, see *infra* note 89.

28. FRANK E. WOZNIAK, *IRRIGATION IN THE RIO GRANDE VALLEY, NEW MEXICO: A STUDY AND ANNOTATED BIBLIOGRAPHY OF THE DEVELOPMENT OF IRRIGATION SYSTEMS* 116 (1998).

29. *Compare* U.S. DEP’T COM. 1940, *supra* note 1, with U.S. DEP’T COM. 1970, *supra* note 1. The region’s population increased significantly between 1940 and 1960.

30. *See generally* Thomas L. Daniels, *The Use of Green Belts to Control Sprawl in the United States*, 25 PLAN. PRAC. & RSCH 255, 255–271 (2010).

recent years has a negative net cash farm income.³¹ New Mexico's version of a Greenbelt law decreased farmland property taxes in an effort to keep land in agricultural use and ease the burden of rising land values.³² The program was created in 1967 during the 28th State Legislative Session and currently is written as such:

The value of land used primarily for agricultural purposes shall be determined on the basis of the land's capacity to produce agricultural products. Evidence of bona fide primary agricultural use of land for the tax year preceding the year for which determination is made of eligibility for the land to be valued under this section creates a presumption that the land is used primarily for agricultural purposes during the tax year in which the determination is made.³³

The statute allows agricultural land in New Mexico to be assessed, for property tax purposes, based on its capacity to produce agricultural products rather than at regular market value.³⁴ Essentially, if a landowner is farming (or grazing farm animals) and can prove it to their county, the value used for calculating their property tax bill decreases—sometimes significantly. This results in lower property taxes due. The law was the result of a compromise built out of two senate bills in the 28th New Mexico Legislative Session of 1967.³⁵ This original 1967 law was in place until 1973, when Representative Eugene Cinelli (Democrat) sponsored an effort to consolidate state tax laws at the 31st New Mexico Legislative Session.³⁶ Cinelli was critical of previously convoluted, scattered, and unequitable property tax rules and compiled them into one all-encompassing chapter of law through House Bill 115.³⁷

New Mexico's Greenbelt law defines agricultural use as “the use of land for the production of plants, crops, trees, forest products, orchard crops, livestock, poultry or fish,” and also includes land that “meets the requirements for payment or other compensation pursuant to a soil conservation program under an agreement with an agency of the federal government.”³⁸ The 1967 law originally stated that agricultural use was not to be “subordinate to another use or purpose of the owner, such as holding for speculative land subdivision and sale, commercial use of a nonagricultural character, recreational use or other nonagricultural purpose,”³⁹ though the speculative land subdivision clause has since been removed.⁴⁰ The current version of the statute directs New Mexico's Taxation and Revenue Department to create regulations for determining agricultural land status, including procedures for measuring the carrying capacity of grazing land and for calculating a property's

31. U.S. DEP'T AGRIC., *supra* note 15.

32. N.M. STAT. ANN. § 7-36-20 (2021).

33. *Id.*

34. *Id.*

35. S.B. 380, 1967 Leg., 28th Sess. (N.M. 1967); S.B. 421, 1967 Leg., 28th Sess. (N.M. 1967).

36. *Study Group Peers Through Jungle at Property Taxes*, NEW MEXICAN 49 (Sept. 27, 1972).

37. H.B. 115, 1973 Leg., 31st Sess. (N.M. 1973). Agricultural valuation is nested within section 21 of the bill.

38. N.M. STAT. ANN. § 7-36-20 (2021).

39. N.M. STAT. ANN. § 7-36-20 (1967).

40. *See infra* note 156.

value based on its capacity for producing agricultural products.⁴¹ The agricultural valuation applies to both irrigated and dry land, including property used for grazing.⁴² This investigation has considered Bernalillo County properties that have the agricultural valuation *and* are irrigated by the MRGCD.

C. New Mexico Agricultural History and Background

Irrigated farming in New Mexico originated with Puebloan communities, prior to Spanish colonization in the sixteenth century.⁴³ Though some regions of New Mexico have financially successful crop farming (e.g., in the Elephant Butte Irrigation District, and in the southern region of the MGRCD, which encompasses Socorro County), this has often not been the case for farming in Bernalillo County.⁴⁴ In describing the Middle Rio Grande Basin in 1987, historian Ira Clark writes: “The traditional agricultural of the valley, strengthened by the growth of Albuquerque, was one of small farms which returned minimal profits, with family members seeking employment elsewhere to supplement their meager incomes.”⁴⁵ In 2017, the U.S. Department of Agriculture (USDA) placed the County’s average net cash farm income at a loss of \$3,827.⁴⁶ Data from the Bureau of Economic Analysis (BEA) shows average net farm income for Bernalillo County from 2000 to 2020 has mostly decreased over time, including seven consecutive negative years from 2013-2019 that ranged from -\$940 to -\$3,334.⁴⁷

The USDA defines a farm as “any place that produced and sold—or normally would have produced and sold—at least \$1,000 of agricultural products during a given year.”⁴⁸ Its most recent Agricultural Census recorded 791 irrigated farms and 4,250 irrigated acres in Bernalillo County.⁴⁹ During 2020, 281 irrigated parcels in Bernalillo County were enrolled in the tax program and valued at less than \$1,000, using the tax program’s definition of “the land’s capacity to produce

41. N.M. STAT. ANN. § 7-36-20 (2021).

42. *Id.*

43. JOSÉ A. RIVERA, *ACEQUIA CULTURE: WATER, LAND AND COMMUNITY IN THE SOUTHWEST I* (1998).

44. Three of the four counties within MRGCD’s jurisdiction had a negative net cash farm income during the 2017 Census of Agriculture – the only county that reported a positive value in the USDA 2017 Census of Agriculture was Socorro. U.S. DEP’T AGRIC., *supra* note 15. Net cash farm income of operations, on average in 2017, per farm for the Middle Rio Grande Basin counties are as follows: Santa Fe County, -\$5,452; Sandoval County, -\$513; Bernalillo County, \$3,827; Valencia County, -\$3,516; Socorro County, \$11,067; Torrance County, \$6,415. Cibola County data were withheld from the census to avoid sharing identifying data. *Id.*

45. IRA G. CLARK, *WATER IN NEW MEXICO: A HISTORY OF ITS MANAGEMENT AND USE* 387 (1987).

46. U.S. DEP’T AGRIC., *supra* note 15.

47. U.S. BUREAU ECON. ANALYSIS, *CAINC45 Farm Income and Expenses, 2000-2020* (on file with lead author); *see* BEA Farm Income spreadsheet cells AJ30-BD30 (on file with lead author). For the purposes of this paper, the data were adjusted to January 2020 dollars using the Bureau of Labor Statistics’ CPI inflation calculator. *See CPI Inflation Calculator*, U.S. BUREAU LAB. STAT., <https://perma.cc/GR4B-RWQU> (last visited Dec. 10, 2022). This shifted the given negative range of -\$852 to -\$3,253 to an adjusted range of -\$940 to -\$3,334.

48. ROBERT A. HOPPE & JAMES M. MACDONALD, *UPDATING THE ERS FARM TYPOLOGY 2* (2013).

49. U.S. DEP’T AGRIC., *2017 AGRICULTURAL CENSUS VOLUME 1, CHAPTER 2: COUNTY LEVEL DATA* 290 (2017). These categories include number of farms irrigated and irrigated land in acres.

agricultural products.”⁵⁰ Farm-specific data from the USDA are not available, so it is not possible to see how much overlap exists between these two ways of considering \$1,000 in value. However, in contemplating the separate definitions, it can be inferred that the USDA’s reports exclude data from many irrigated properties in the Middle Rio Grande Basin that are enrolled in this tax program.

Despite being non-commercial, the agricultural history in New Mexico is rich, and farming contributes value to the state in ways not easily quantifiable. According to a 2011 New Mexico State University (NMSU) study on state property taxes, in the increasing peri-urban fringe, “a drastic increase or revaluation of taxes on agricultural property would cause irreparable harm to the agricultural communities and the well-being of the people of New Mexico as a whole.”⁵¹ In researching agriculture’s economic impact on Albuquerque’s South Valley in Bernalillo County, agricultural economists Tyler Holmes and Rhonda Skaggs found little concrete economic impact data, but did identify an emotional connection to agriculture: “These residents believe that small-scale irrigated agriculture is an essential component of their culture and heritage, is the foundation of their identity as land-based people, results in health benefits, and is something to which they are deeply connected.”⁵²

Despite the strong cultural connection, irrigated agricultural acreage declined in Bernalillo County after the 1940s.⁵³ By the time the Greenbelt law was passed in 1967, land had already been significantly shifting from agricultural areas to housing developments for decades—between 1940 and 1960, rural land in Bernalillo County dropped from 49% to a mere 8%.⁵⁴ Thus, the argument can be made that the law was a “horse-had-left-the-barn” scenario.⁵⁵

50. Evidence of the capacity to produce outputs can be demonstrated by the expenditures on inputs.

51. JOHN M. FOWLER & ROY SEAWOLF, *LEGACY OF AGRICULTURAL PROPERTY TAX IN NEW MEXICO* 2 (2011).

52. HOLMES & SKAGGS, *supra* note 19, at 1.

53. Irrigated acreage in Bernalillo County dropped from 671,435 acres in 1950 to 9,977 in 1969. *See* U.S. DEP’T AGRIC., 1950 AGRICULTURAL CENSUS: NEW MEXICO AND ARIZONA 43 (1950); U.S. DEP’T AGRIC., 1969 AGRICULTURAL CENSUS: NEW MEXICO 254 (1969).

54. *Compare* U.S. DEP’T COM. 1940, *supra* note 1, with U.S. DEP’T COM. 1970, *supra* note 1.

55. The issue is not a question of using public funds or subsidy for provision of public open space or green space, including of an agricultural character. However, it can be argued that rather than focusing public subsidy on vaguely defined subsistence farming in an already urban county, an alternative focus could have been on using public funds for public acquisition and access to green space and open space, including outside of the MRGCD levees and the bosque. Significant public efforts to convert private agricultural land into public ownership (often with some retained agricultural focus, such as feed for migratory birds) have subsequently occurred in Bernalillo County, and within the MRGCD boundaries. Some examples include the acquisition of the 167-acre Candelaria Nature Preserve in 1977 and the 138-acre Los Poblanos Open Space in 1997. *See Open Space Farmlands*, CITY OF ALBUQUERQUE, <https://perma.cc/AHG3-NVSZ> (last visited Dec. 10, 2022). There is also the 570-acre Valle del Oro National Wildlife Refuge, located on a former dairy farm several miles south of Albuquerque. *See Valle De Oro About Us*, U.S. FISH AND WILDLIFE SERV., <https://perma.cc/J2J9-CAPR> (last visited Dec. 10, 2022).

D. MRGCD History

Born out of the efforts of a business and civic coalition centered in Albuquerque, the Middle Rio Grande Conservancy District was created in 1925 under New Mexico's Conservancy Act of 1923.⁵⁶ The District was then grandfathered into the Conservancy Act of 1927, with purposes including flood protection and river control for a growing Albuquerque, draining swampland, and diverting water from the Rio Grande for supporting irrigated agriculture.⁵⁷ The District's creation allowed the financing and construction of the extensive levee, diversion, ditch, and drainage system that extends through the four counties of MRGCD's jurisdiction.⁵⁸ This includes Bernalillo County, the center of today's Albuquerque metropolitan statistical area.

The District's history is entangled with a mythology of large-scale agriculture in the Rio Grande Valley in the mid-late 1800s, with the oft-repeated claim that "in the 1880s . . . there were 124,800 acres in irrigation in the middle Rio Grande Valley."⁵⁹ This myth has long underpinned the District's approach to expanding or at least maintaining the valley's agricultural base. But a careful review of the underlying data suggests actual irrigated acreage in the 1800s was far less.⁶⁰

With construction initiated in the early 1930s, the MRGCD water diversion and distribution system, placed over the top of the historical, decentralized acequia system, successfully drained the increasingly swampy lowlands and alkali soils.⁶¹ Through the mid-1950s, the system did initially increase total irrigated agricultural acreage in Bernalillo County.⁶² With its own bonding capacity, implementation of the MRGCD came with new tax levies initially based primarily on the expected benefits of reclamation to a piece of property rather than its assessed value (as in the single-classification, *ad valorem* property tax system now in place).⁶³ Enacted during the Great Depression, this put considerable financial pressure on the predominately Hispanic, small-scale subsistence farmers; it pushed many families off the land or out of farming entirely, and led to considerable conflict with the community.⁶⁴

Farm protest groups in the late 1920s and early 1930s expressed concern that more economically productive objectives would take precedence over existing subsistence farming culture—acequia scholar Jose Rivera expressed as such in

56. Lisa D. Brown, *The Middle Rio Grande Conservancy District's Protected Water Rights: Legal, Beneficial, or against the Public Interest in New Mexico*, 40 NAT. RES. J. 1, 4 (2000).

57. Conservancy Act of New Mexico, N.M. Stat. Ann. §§ 73-14-1 through 73-19-5 (West 1923). The 1923 act was later superseded by Ch. 45, New Mexico Laws (1927), entitled: "An Act to Provide for the Organization of Conservancy Districts, to Define the Purposes and Powers Thereof and to Repeal Chapter 140 of the Session Laws of New Mexico, 1923, and All Acts or Parts of Acts in Conflict with Any Provision of This Act."

58. See Stephen A. Thompson, *Urbanization and the Middle Rio Grande Conservancy District*, 76 GEOGRAPHICAL REV. 35, 35–50 (1986).

59. MIDDLE RIO GRANDE CONSERVATION DISTRICT, BOARD RESOLUTION M-09-24-18-157 (2018) (on file with lead author).

60. WOZNAK, *supra* note 28.

61. Conservancy District Water Policies Plan, *supra* note 17.

62. *Id.* at 13.

63. *Id.* at 20–21.

64. McDonald et al., *supra* note 17, at 5.

discussing development in historic farming communities: “Among competing values, economic values are the most often asserted, are most easily quantified, and have been the most subsidized.”⁶⁵ The strife included a 1929 New Mexico Supreme Court ruling supporting the MRGCD implementation,⁶⁶ and what were later deemed the “Ditch Wars” in 1930 that occurred both north and south of Albuquerque (e.g., Los Chavez in nearby Valencia County, and Los Duranes in Albuquerque’s North Valley area).⁶⁷

Despite the legitimate affordability concerns of many of those who would become its initial constituents, the District continued building but soon “found itself unable to effectively raise capital through taxation, and could not afford the necessary maintenance on much of its works. Many irrigable lands sat unused because their owners could not pay their assessment fees.”⁶⁸ In 1951, the U.S. Bureau of Reclamation began mitigation measures for the District on issues including delinquent taxes and resulting lack of cashflow (altering the future tax and finance structure), as well as severe flooding, putting tens of millions of dollars toward the rehabilitation.⁶⁹

Meanwhile, Bernalillo County was becoming an increasingly popular destination as rail and road transportation developed across the southwest United States.⁷⁰ From 1920 to 1960, Albuquerque’s population increased from just over 15,000 residents to more than 201,000.⁷¹

MRGCD eventually moved to a more stable revenue structure, based more heavily on urban property taxes, and the growing value of urban land.⁷² With a change in the late 1950s, the District was legally moved from a benefits-based tax levy system to a two-tiered classification system, heavily dependent on an *ad valorem* property tax on non-irrigators, and more consonant with a non-commercial agricultural area and a large urban center.⁷³ As one example from the peri-urban fringe, in Albuquerque’s North Valley, the Village of Los Ranchos was created in 1957 and had a more affluent demographic, with landowners that could presumably

65. RIVERA, *supra* note 43, at xiii.

66. See *Gutierrez v. Middle Rio Grande Conservancy District*, 1929-NMSC-071, ¶ 58, 34 N.M. 346, 282 P. 1, 8.

67. See McDonald et al., *supra* note 17, at 8. For detailed period statements concerning the Los Chavez dispute by Max Gutierrez (leader of the Farm protest association), and Pearce Rodey (MRGCD attorney), see *Gutierrez, Rodey make Statements Concerning Troubles at Los Lunas*, ALBUQUERQUE J., Apr. 21, 1920, at 1. For similar statement by the MRGCD attorney and farm protest association concerning the incident at Los Duranes, north of Old Town in Albuquerque, see *District Heads Await Moves in Ditch Troubles*, ALBUQUERQUE J., May 12, 1930, at 3.

68. *Middle Rio Grande Conservancy District History*, MIDDLE RIO GRANDE CONSERVANCY DIST., <https://perma.cc/9A4C-VFDJ> (last visited Dec. 10, 2022).

69. ANDREW H. GAHAN, MIDDLE RIO GRANDE PROJECT 12 (2013); CLARK, *supra* note 45, at 387–88.

70. *Albuquerque Transportation History, U.S. Statehood Transportation & Communication, 1912–1945*, WHEELS MUSEUM, <https://perma.cc/ASR9-TATT> (last visited Dec. 10, 2022).

71. Compare U.S. DEP’T COM. 1940, *supra* note 1, table 10, at 33–14, with U.S. DEP’T COM. 1970, *supra* note 1.

72. Conservancy District Water Policies Plan, *supra* note 17, at 22–23.

73. *Id.*

more easily afford the District's tax assessments.⁷⁴ In a recent written description of its history, the District states:

[T]he continued presence of farming in the middle valley gives the area a unique rural/urban environmental and social mix. Here, a Greenbelt of small farms, irrigated lands, and a variety of pastures and gardens within the city and township limits help temper the contemporary, urban landscapes. With increased urbanization, the Conservancy has [developed an] oasis in the midst of the state's largest metropolitan area.⁷⁵

II. CURRENT APPLICATION OF THE GREENBELT LAW

A. The Law Today and How It Works

The Taxation and Revenue Department authored a New Mexico Administrative Code chapter with directions for each county to administer intra-departmentally when making valuation determinations.⁷⁶ In Bernalillo County, a landowner may apply for an agricultural valuation through the County Assessor's office.⁷⁷ The County presents three main standards: (1) the property must be used for a bona fide agricultural purpose; (2) the agricultural use must be the primary use of the land; and (3) the agricultural use cannot be passive or incidental.⁷⁸

If the land has been granted this valuation in the immediately preceding year, a new application is not required and after three consecutive years, a "presumption of agricultural use" exists.⁷⁹ Agricultural use can be proved in a variety of ways, including farm income reports or expense reports, evidence of product sales or intent to sell, and evidence of subsistence or as feed.⁸⁰

The land must be at least one acre in size—though waivers may be requested and granted for less—and residential buildings, yards, driveways, and parking areas are excluded.⁸¹ Upon receiving a landowner's application, an Assessor's office employee makes a field visit to measure and evaluate the actual area of agricultural use.⁸² If there is nonagricultural use on the property that brings in more income than the agricultural use (e.g., a property that farms alfalfa but also operates a bed-and-breakfast operation), it does not qualify for the agricultural valuation program.⁸³

74. TIFFANY JUSTICE ET AL., *THE VILLAGE OF LOS RANCHOS DE ALBUQUERQUE 2035 MASTER PLAN 20* (2019); TIFFANY JUSTICE ET AL., *THE VILLAGE OF LOS RANCHOS DE ALBUQUERQUE 2035 MASTER PLAN APP. 4-5* (2019) (both discussing income levels and off-farm earnings).

75. *Middle Rio Grande Conservancy District History*, *supra* note 68.

76. *See generally* Valuation, New Mexico Administrative Code, 3.6.4.2 NMAC (Aug. 31, 1996).

77. *See generally* BERNALILLO CNTY. ASSESSOR'S OFF., *BERNALILLO COUNTY ASSESSOR'S POLICIES AND PROCEDURES: SPECIAL METHOD OF AGRICULTURAL VALUATION* (2021).

78. *Id.*

79. *Id.*

80. *Id.*

81. *Id.*

82. *Id.*

83. *Id.*

On an internal level, Bernalillo County utilizes the *New Mexico County Assessor's Agricultural Manual*.⁸⁴ The capitalization rate method, defined in the manual as the “market rate of return expressed as a percentage,” is applied to agricultural income (or potential income) and used to calculate the agricultural value.⁸⁵ Income or potential income are determined based on a myriad of factors, including soil type and slope, historical weather data, cost and availability of water, cultural crop practices in the area, and comparisons to nearby properties.⁸⁶

There are some discrepancies between landowner-facing materials and internally used materials. The posted information sheet states, as mentioned above, that a new application is not needed each year. The manual, however, states that “[t]he owner of the land must make application to the County Assessor in each tax year in which the valuation method of this section is claimed to be applicable to his land.”⁸⁷ It is unclear which guideline is put into practice.

Bernalillo County's agricultural assessments are processed as such: For a parcel without an agricultural assessment, its tax rates are applied to one-third of the net taxable value (on a tax bill, the wording is “assessed value land” plus “improvements” less any applicable exemptions) and the resulting total is the amount of taxes owed.⁸⁸ When a parcel is enrolled in the agricultural use program, the standard “assessed value land” value is replaced with one-third of the agricultural valuation determined by the County, and this value is almost always lower.⁸⁹ This appears on a tax bill as “taxable value land.” The tax rate is then applied to that value.⁹⁰ To summarize: the tax rate applied to the property does not change, but the net taxable value does.⁹¹

84. See generally NEW MEXICO COUNTY ASSESSOR'S AGRICULTURAL MANUAL, retrieved from Bernalillo County (2021) (on file with lead author).

85. *Id.* at p. A-4, A-10.

86. *Id.* at A-9, A-10.

87. *Id.* at p. A-2.

88. For an example provided by the Bernalillo County Assessor's Office, see *Understanding Your Notice of Value*, OFF. ASSESSOR BERNALILLO CNTY., <https://perma.cc/VPZ9-925P> (last visited Dec. 13, 2022).

89. Most basically, the calculated annual tax bill for a property without an agricultural assessment can be represented as: $(((\text{IMPROVEMENTS\$} + \text{LANDS\$}) * 1/3) - (\text{EXEMPTIONS\$})) * \text{TAXRATE} = \text{TAXES DUE}$.

The calculated annual tax bill for a property **with** an agricultural assessment can be represented as $(((\text{IMPROVEMENTS\$} + \text{AGLANDS\$}) * 1/3) - (\text{EXEMPTIONS\$})) * \text{TAXRATE} = \text{TAXES DUE}$.

Where: IMPROVEMENTS\$ is the assessed value of structures on the property, LANDS\$ is the assessed value of land (non-agricultural), AGLANDS\$ is the assessed value of agricultural land receiving the special use valuation, EXEMPTIONS\$ represents the combination of several possible deductions (e.g., \$4,000 in 2020 for veterans, and \$2,000 for head of family, etc.), and TAXRATE is the given tax rate in a year and tax district for that particular property. The material inside the brackets [] represent the net taxable value. This was confirmed by the Bernalillo County's Assessor's Office as the correct alternate calculation.

90. *Id.*

91. *Id.*

B. Intent of the Program

Understanding intent is paramount to the administration and implementation of the Greenbelt law, and different interpretations of the original discussions lead to notably different results in program enrollment. Two state court cases have taken up the task of interpreting the legislative intent behind the statute for situations in the Albuquerque area.

County of Bernalillo v. Ambell in 1980 involved a property owner whose land had transitioned out of agricultural use.⁹² The main issue of the case was how the property would be assessed directly after the agricultural valuation was removed.⁹³ New Mexico Supreme Court Justice Mack Easley noted that the original legislation communicated a clear intent for a “dramatic tax-break.”⁹⁴ Easley stated:

It is clear that the legislative intent behind this special method of property tax valuation is to aid the small subsistence farmers in our state. But once a property’s use has changed from agricultural to non-agricultural, there is no longer the need to give the property owner special tax treatment.⁹⁵

A pertinent issue arising from this quote is the definition of “subsistence.” While the word does not appear in the text of the statute itself, this court asserted that enrolled property owners should be using the land for subsistence farming.⁹⁶ In the twenty-first century, subsistence farming is difficult to define. The National Agricultural Library defines it as “[a] farming system where the food and goods produced are predominantly consumed by the farm family and there is little surplus for sale in the market.”⁹⁷ This definition could support hobby farms and areas like the Village of Los Ranchos, which have landowners with higher income levels than surrounding areas and whose income is generated predominately off-farm.⁹⁸ However, other definitions of subsistence speak to “a bare or minimum level of existence.”⁹⁹ This lends more to the idea that mere survival would depend on the items providing sustenance, likely excluding hobby farms.¹⁰⁰ Then, aside from either

92. *Bernalillo County v. Ambell*, 1980-NMSC-062, ¶ 2, 94 N.M. 395, 395, 611 P.2d 218, 218.

93. *Id.* at 218–219.

94. *Id.* at 218.

95. *Id.* at 220.

96. *Id.* (“It is clear that the legislative intent behind this special method of property tax valuation is to aid the small subsistence farmers in our state.”).

97. *Subsistence Farming*, U.S. DEP’T AGRIC., <https://perma.cc/CP9T-6G7Y> (last visited Dec. 13, 2022).

98. TIFFANY JUSTICE ET AL., *supra* note 74, at 20, app. 4–5.

99. “*Subsistence*,” OXFORD ENGLISH DICTIONARY, <https://www-oed-com.libproxy.unm.edu/view/Entry/193020?redirectedFrom=subsistence> (last visited Mar. 2022).

100. Among the typology of small, non-commercial farms, it is common to see discussion of hobby farms connected to patterns of “horsification” (increasing horse ownership) in the peri-urban fringe. For discussion, see generally Bingjie Song et al., *Hobby and Part-Time Farmers in a Multi-Functional Landscape: Environmentalism, Lifestyles and Amenity*, 60 GEOGRAPHICAL RSCH. 480, 480–94 (2022); Lisa A. Sutherland et al., *Beyond ‘Hobby Farming’: Towards a Typology of Non-Commercial Farming*, 36 AGRIC. HUM. VALUES 475, 475–93 (2019).

of those views, there are properties in Bernalillo County that are operated as “U-pick,” or leased, third-party operated farms, which by their very definition are not intended to be consumed by the farm family. Even the wider definition would not include third-party farming, despite the tax program allowing it. These varying definitions call into question whether the language of New Mexico’s Greenbelt law still supports subsistence farming.

In 1999, the New Mexico Court of Appeals took up the issue of the intent behind this statute in *Alexander v. Anderson*, but within a different framework: whether the involved land was used actively or passively for its agricultural use.¹⁰¹ Several property owners were denied agricultural valuations for the 1996 tax year after having been granted them in prior years.¹⁰² One family had previously sold its alfalfa crop for income, but current yields were only being used to feed their own horses.¹⁰³ Other property owners were denied the agricultural valuation because the court found that “they maintain the grass primarily as a lawn, saving only a small portion to be cut and baled each year . . . the primary use of the property is a residential ‘homesite’ and not land primarily put to agricultural use.”¹⁰⁴ The denials came after County workers conducted field visits and observed that the owners were using the agricultural products only for themselves, without attempting to make a profit. Judge Armijo’s opinion noted that the courts “must construe the Legislature’s intent in its provision of the ‘agricultural use’ exemption and give explicit meaning to its chosen words.”¹⁰⁵ The opinion continued, stating, “[w]e find that Section 7-36-20 evinces a legislative intent to deny tax relief to those who demonstrate mere passive or incidental cultivation of their lands,”¹⁰⁶ Finally, Judge Armijo concluded, “it is not merely ‘agricultural use’ which qualifies a property under this provision, but ‘bona fide agricultural use.’”¹⁰⁷

It is difficult to evaluate intent, and difficult to prioritize one intent over another. This holds true in an area like central New Mexico, and especially a county like Bernalillo that houses a large urban center, where agriculture represents a strong connection to culture and history but is predominately non-commercial in nature.¹⁰⁸ What rules should be used to navigate this, and can it be done objectively? Putting the above discussion into practice would almost certainly call for removal of the agricultural valuation—and potentially, subsequently the agriculture—of some properties in the area. In attempting to measure success of the law, if the collective or public goal is to keep agricultural land from being developed, then it is fair to say success has been reached. However, looking at available demographics of who is

101. *Alexander v. Anderson*, 1999-NMCA-021, ¶ 13, 126 N.M. 632, 637, 973 P.2d 884, 889.

102. *Id.* at 634.

103. *Id.*

104. *Id.* at 635.

105. *Id.* at 634.

106. *Id.* at 636.

107. *Id.*

108. HOLMES & SKAGGS, *supra* note 19, at 1, 10.

using the program, it can be argued that the intended target audience, subsistence farmers, is not the same audience currently utilizing the program.¹⁰⁹

As well as trying to interpret original legislative intent, it is likewise important to think about future consequences. What should the goal of the program be moving forward as the state contends with climate change? Non-market values attributed to ecosystem goods and services that have been partially generated by the agricultural valuation like green space access, species habitat (native, non-native and migratory), and urban heat island effect relief must be considered if a reevaluation takes place.¹¹⁰ In this, several questions present themselves: do the non-market values created by the “ribbon of green” through Albuquerque outweigh the price (monetary or otherwise) of its water use, as well as foregone tax revenues? Are benefits to community and wildlife significant enough positive externalities to reframe the program to include them as qualifying factors? Or should the focus be narrowed by defining “subsistence farming” and implementing stricter enforcement? Alternatively, would the equivalent of the current public subsidy to private landowners be better focused, from both an efficiency and social equity perspective, on additional public acquisition of open space and green space?

C. 2020 Data: Land, Water and Dollars

For this investigation, land use data were obtained from Bernalillo County Assessor’s office and irrigation data were obtained from the MRGCD’s mapping department. GIS software was used to extrapolate the parcels that were included in both layers. This yielded 1,003 parcels encompassing 4,388 acres that fell within the scope of land that: (1) received the agricultural valuation for their land and (2) used Rio Grande surface flows to irrigate it.¹¹¹ We focus on these 1,003 properties, some of which received more than a 99% discount on land value when enrolled in the tax program (leading to a similarly significant discount on their property tax bills).¹¹²

109. JUSTICE ET AL., *supra* note 74 (showing the currently affluent demographic of the Village of Los Ranchos, which is a high-density area for the agricultural valuation). See also *Bernalillo County v. Ambell*, 1980-NMSC-062, ¶ 2, 94 N.M. 395, 395, 611 P.2d 218, 218.

110. In addition to those connected to the bosque (riparian areas) within the Middle Rio Grande’s levee system, there are ecosystem goods and services generated by the *distribution of green*, i.e., by the diversion, drainage and irrigation delivery system of the MRGCD. See explicit 1993 MRGCD policy recognition and discussion in Conservancy District Water Policies Plan, *supra* note 17. For general definition and discussion of ecosystem goods and services (commonly not directly priced and traded in markets), see Thomas C. Brown et al., *Defining, Valuing, and Providing Ecosystem Goods and Services*, 47 NAT. RES. J. 329, 330–376 (2007). For a discussion and modeling assessment of the beneficial economic value attributed to the ecosystem services provided by irrigated trees in the greater Albuquerque, NM area, see Benjamin A. Jones & John Fleck, *Urban Trees and Water Use in Arid Climates: Insights from an Integrated Bioeconomic-Health Model*, 4 WATER ECON. POL’Y 1 (2018).

111. Full data spreadsheets and GIS files are on file with lead author.

112. *Id.*

Table 1: 2020 Land Values¹¹³

2020 Land Values	
Bernalillo County parcels receiving an agricultural valuation (including non- irrigated)	3,689 parcels
Land enrolled in MRGCD's irrigation system (including land not receiving agricultural valuation)	2,273 parcels
Intersection of above data sets: MRGCD- enrolled and actively irrigated land with the ag valuation	1,003 parcels/4,388 acres
Total assessed value of parcels 1,003 without agricultural valuation	\$141,080,029
Total assessed value of 1,003 parcels with agricultural valuation	\$35,967,622 (less than 25% of total regularly assessed market value)

Each irrigated land parcel is categorized by MRGCD using one or more of 10 crop codes: alfalfa hay, irrigated pasture, other hays/grasses, corn, vegetables/row crops, garden, fruit trees, nursery trees, other trees, and yards.¹¹⁴

Table 2: 2020 Crop Data

2020 Crop Data	
Exclusively alfalfa hay, other hay, or irrigated pasture	3,803 acres
Trees and irrigated pasture	1,276 acres
Trees and yards	130 acres
Vegetables/row crops, gardens, and corn	64 acres
Yards	101 parcels/98 acres/\$98,000 collective savings on property tax bills

One particularly notable result the dataset yielded was 101 unique properties that MRGCD has designated only as “yard,” which seems to indicate

113. Full data spreadsheets and GIS files are on file with lead author.

114. MRGCD crop codes legend is on file with lead author.

passive, non-agricultural use, despite receiving the tax benefit.¹¹⁵ If MRGCD's classification is correct, this utilization of the Greenbelt law is clearly outside the bounds of the program, no matter whose definition is used—the statute's, municipal government, state government, or the courts'.¹¹⁶ Bernalillo County's published information sheet about the program states that "[a]ppurtenant residential lands which are also ineligible for the agricultural valuation include, but are not limited to, the following: yards, lawns, driveways, swimming pools, tennis courts, and all such similar facilities."¹¹⁷ Some of these "yard" categories fall within the boundaries of the demographically affluent Village of Los Ranchos, which had 219 total properties with the agricultural valuation in 2018.¹¹⁸ This, and the mere existence of the "yard" category, lend to the assertion that the tax program may not be currently used as was originally intended by legislature.

We processed the individual tax bills of all 1,003 properties to see what their owed taxes would have been in 2020 had the agricultural valuation not been applied. Several key results follow:¹¹⁹

- Landowners each saved an average of \$1,608 on their property tax bills.
- Total landowner savings across all properties (and inversely, revenue loss to Bernalillo County) was \$1,783,226.
- Property tax bills averaged 43.9% of what they would have been without agricultural valuation.
- Sixty-three properties saved more on their taxes than the average USDA-calculated Bernalillo County net cash farm income loss of \$3,827.

From a landowner perspective, financial benefit is the most straightforward gain from the Greenbelt law. This can partially explain the persistent pattern of negative net cash farm income, observed on average, in Bernalillo County¹²⁰—these properties either lose money or have minimal income, but this is partially (and sometimes almost fully) offset by the agricultural valuation on property taxes. To help illustrate, a sample of six properties was generated using the previously stated calculations and 2020 agricultural valuation data. Results are presented in Table 3 below.¹²¹

115. Full data spreadsheets and GIS files are on file with lead author.

116. N.M. STAT. ANN. § 7-36-20 (2021); *Ambell*, *supra* note 92; *Anderson*, *supra* note 101.

117. BERNALILLO CNTY. ASSESSOR'S OFF., *supra* note 77.

118. E-mail from James Kolberg, Socioeconomic Analyst, Mid-Region Council of Governments of New Mexico, to Annalise Porter (Feb. 15, 2022, 02:31 PST) (on file with lead author).

119. Results based on alternate tax calculations, *supra* note 89. Spreadsheet with full data set on file with lead author.

120. U.S. DEP'T AGRIC., *supra* note 15.

121. Calculated by authors, *supra* note 89.

Table 3: Sample of Six Parcels in Bernalillo County¹²²

	Crop designation	Irrigated acreage	Property taxes paid with agricultural valuation (\$)	Estimated full taxes without agricultural valuation (\$)	Savings of estimated full taxes (\$)	Percent of estimated full taxes paid
Parcel 1 below median size	Yard	0.4	\$4,780	\$6,963	\$2,183	69%
Parcel 2 below median size	Yard	1	\$327	\$834	\$507	39%
Parcel 1 at median size	Alfalfa hay	2	\$7	\$2,104	\$2,097	0.3%
Parcel 2 at median size	Alfalfa hay	2	\$3,295	\$3,369	\$74	98%
Parcel 1 above median size	Irrigated pasture/fruit trees	3	\$15,933	\$17,753	\$1,820	90%
Parcel 2 above median size	Alfalfa hay	4.8	\$42	\$716	\$674	6%
Totals			\$24,382	\$31,739	\$7,355	50%* *shows average

122. The sample includes two randomly chosen parcels that are the median size (two acres in Bernalillo County); two that are smaller than the median size of 2 acres; and two that are above the median size. Dollar values and percentages were rounded to the nearest whole number for clarity.

On the flip side of landowner financial gain is Bernalillo County's loss—most of the County's revenues come from property taxes and gross receipts taxes.¹²³ By depleting these revenues, the agricultural valuation system puts a higher burden on all taxpayers across the region. Also on the losing side of financials is MRGCD, which receives funding from property tax revenues as well. For the fiscal year ended June 2021, 83% of the District's revenues (\$19,100,137) came from *ad valorem* collections, with two thirds of that coming from Bernalillo County.¹²⁴

Consumptive water use is a significant factor of the Greenbelt law and a reason we advocate for adapting it. Consumptive use is difficult to quantify for multiple reasons in Bernalillo County. On an agricultural basis, the middle basin does not currently have the infrastructure to track diversion and return flows at the individual irrigator level (though other irrigation basins in the state do track at this level).¹²⁵ Additionally, water rights in the Middle Rio Grande are not fully adjudicated, flows have lowered over time, and transparency of water use in the state has been an ongoing concern.¹²⁶

An assumed average consumptive use of 2.5 acre-feet per acre of irrigated land has been utilized for this report, considering commonly used estimates in the region.¹²⁷ We applied this rough estimated average to the 1,003 parcels (encompassing 4,388 acres) with the agricultural valuation designation that were irrigated in 2020.¹²⁸ This equates to a total estimated potential consumptive use of 10,970 acre-feet.¹²⁹ For perspective, this amount is equivalent to 22% of the entire Albuquerque Bernalillo County Water Utility Authority (ABCWUA, the water and wastewater provider for the greater Albuquerque area) surface and groundwater consumptive use in 2020,¹³⁰ more than 10% of the water that New Mexico owed Texas at the end of 2020 (via the Rio Grande Compact) after a particularly dry

123. *Finance, Sources of Funding*, BERNALILLO CNTY., <https://perma.cc/4ZB2-GHQN> (last visited Dec. 13, 2022).

124. FINANCIAL STATEMENTS AND INDEPENDENT AUDITORS' REPORT 17 (2021). It should be noted that these are revenues for the entire District, which extends significantly outside of Bernalillo County. A Bernalillo County-specific value was not available.

125. Physical observation of MRGCD's ditch system yielded a system comprised of locked gates that require unlocking and physically opening. No mechanized pieces are involved. See photos on file with lead author. See also *Irrigation Systems, How Irrigation Systems Measure Water Delivery*, ELEPHANT BUTTE IRRIGATION DIST., <https://perma.cc/92RY-DRAB> (last visited Dec. 13, 2022).

126. Matthew Reichbach, *ISC 'Wins' Black Hole Award for Lack of Openness*, N.M. POLITICAL REPORT (Mar. 16, 2017), <https://perma.cc/AU2M-EQSK>.

127. See BENJAMIN L. HARDING & JAMES T. McCORD, *EVALUATING HYDROLOGIC EFFECTS OF WATER ACQUISITIONS ON THE MIDDLE RIO GRANDE* (2005); NORMAN GAUME, *EVALUATION OF THE MIDDLE RIO GRANDE CONSERVANCY DISTRICT IRRIGATION SYSTEM AND MEASUREMENT PROGRAM* (2002); Memorandum from Hannah Riseley-White, Pecos Basin Manager to N.M. Stream Commissioners (May 1, 2020).

128. Formula used: ESTIMATED CONSUMPTIVE USE PER ACRE-FOOT*IRRIGATED ACREAGE = ESTIMATED TOTAL CONSUMPTIVE WATER USE ON BERNALILLO COUNTY LAND WITH AGRICULTURAL VALUATION.

129. 2.5 acre-feet * 4,388 acres = 10,970 acre-feet.

130. ABCWUA had a 2020 total consumptive use, including ground and surface water, of 49,507 AF. Email from David Morris, Communications & Public Affairs, ABCWUA, to author (Feb. 14, 2022, 1:31pm PST) (on file with lead author).

season;¹³¹ or enough to fully sustain around 40,000 Albuquerque-area households for a full year.¹³² This is not to say the entire 10,970 acre-feet would have remained unused if the agricultural valuation didn't exist. However, we must acknowledge the program is almost certainly a factor in encouraging water use for the given acreage.

III. THE NEED TO UPDATE THE LAW AND CHALLENGES TO THE PROCESS

A. Institutions and Their Challenges

Agricultural water use (under water allocation rules) and property taxes (under payment rules) are complicated institutional issues when approached separately, and New Mexico's Greenbelt law affects both. Water use is often excluded from tax and land policy conversations,¹³³ as evidenced by this law, where different aspects are tracked by different agencies: the District manages irrigation water use and the Assessor's Office tracks land with agricultural valuations. An institutional arrangement does not currently exist to provide overarching oversight, as evidenced by the lack of coordinated tracking described throughout this paper. It would be beneficial to the peri-urban fringe community and its natural resources for these entities to work in tandem to manage the program, as shown by Vincent Ostrom et al.'s research regarding regional governance in metropolitan areas.¹³⁴ Despite the potential for streamlining and management partnerships, and the fact that both entities are largely dependent on *ad valorem* property taxes,¹³⁵ a lack of legislative guidance and some conflicting motivational factors may create a rift between these agencies and discourage them from working together.

It could be argued that both the County and the District would be motivated to remove false or incorrectly enrolled properties, because both entities benefit from property tax revenues. However, for the MRGCD this is complicated by two factors. The first is that it supplements *ad valorem* property tax revenues (collected on both irrigated and non-irrigated properties within the District) with a flat rate "water service charge" per acre on irrigated parcels. In the 2021 fiscal year, this was \$43.82 per acre, totaling \$2,415,816.¹³⁶ However, these charges have declined since the creation of the program.¹³⁷ The second is that it is widely understood that the District

131. NEW MEXICO OFF. STATE ENG'R, NEW MEXICO ADDENDUM TO THE ENGINEER ADVISERS' REPORT TO THE RIO GRANDE COMPACT COMMISSION 1 (2021). Using accounting method 1, New Mexico had an accrued debit of 91,500 acre-feet as of January 2021.

132. Paul Bossert, *Domestic Wells*, in WATER MATTERS! 115 (Utton Transboundary Res. Ctr., 2015).

133. Bates, *supra* note 12.

134. Vincent Ostrom et al., *The Organization of Government in Metropolitan Areas: A Theoretical Inquiry*, 55 AM. POL. SCI. REV. 831, 831-42 (1961).

135. FINANCIAL STATEMENTS AND INDEPENDENT AUDITORS' REPORT, *supra* note 124, at 9. For the fiscal year that ended June 2021, 83% of the District's revenues came from *ad valorem* property tax collections.

136. *Id.* at 17. It should be noted that these are revenues for the entire District, which extends significantly outside of Bernalillo County. Bernalillo County-specific value was not available.

137. However, despite climate change and increasing water scarcity, the MRGCD's per acre water service charge for irrigators has *declined* in real dollar terms since its inception. The current financing system of a single classification *ad valorem* property tax (for all MRGCD properties) combined with a flat per acre water service charge for all irrigators was implemented in 1995; the given water service

has an inherent goal of irrigating as much land as possible, as demonstrated by a letter sent out to some of the District's customers in 2020 regarding a water banking program, stating that "[t]he Water Bank supports the intent of the MRGCD that as many irrigable acres as possible remain in agricultural production."¹³⁸

Other aspects of the District's operations support the fact that conservation may not be widely prioritized by the agency. It does not utilize increasing block rates like other water-allocating agencies, such as ABCWUA; instead, it charges a flat rate.¹³⁹ Additionally, ABCWUA can raise rates or enforce fines when necessary, during times of drought.¹⁴⁰ MRGCD does not have a similar "conservation toolbox" in place.¹⁴¹ It does, however, have more employees in the field than the County has working along irrigated properties—its irrigation system operators (ISO) are on the ground daily during irrigation season and visit all irrigated properties, whereas the County Assessor's office only visits one-third of properties with an agricultural assessment per year.¹⁴²

Physical jurisdiction also works against the prospect of cooperative efforts in this program. County and District boundaries don't overlap perfectly. For instance, MRGCD's "Albuquerque Division" does not only include Bernalillo County land. Some property in Sandoval County is included, which also has an average negative net cash farm income (in fact, three of the four MRGCD counties have a negative net cash farm income—the only county that reported a positive value in the USDA 2017 Census of Agriculture was Socorro).¹⁴³ Property taxes are handled on a county-by-county basis by each assessor's office, which widens the scope of participants that would need to be involved in cooperative work.¹⁴⁴

charge was set at \$28.00 per acre, which in current 2022 dollars would be \$53.12 (or more than 20% above the MRGCD current rate). Dollars converted using the US Inflation Calculator from the U.S. Labor Department's Bureau of Labor Statistics. See *Inflation Calculator*, U.S. INFLATION CALCULATOR, <https://perma.cc/DVW2-GK6D> (last visited Dec. 13, 2022). For the MRGCD's initial public notice of the 1995 water service charge, see *Public Notice to All Water Users and Irrigable Land Owners within the Middle Rio Grande Conservancy District Service Area*, ALBUQUERQUE J., Mar. 19, 1995, at 63. Article at top of column 5 in scan on file with lead author.

138. Letter from Mike A. Hamman, Middle Rio Grande Conservancy District Chief Executive Officer, to Water Bank Applicants (Jan. 27, 2020).

139. See *The Assessment/Collection Department Assess and Collects a Water Service Charge on Lands That Receive Water from the Works of the District at \$43.82 Per Acre (Subject to Change) on an Annual Basis*, MIDDLE RIO GRANDE CONSERVANCY DIST., <https://perma.cc/LDB3-2XHL> (last visited Dec. 13, 2022); see generally ALBUQUERQUE BERNALILLO CNTY. WATER UTIL., ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY WATER AND SEWER RATE ORDINANCE (2020).

140. ALBUQUERQUE BERNALILLO CNTY. WATER UTIL., *supra* note 139, at 14.

141. MRGCD's board of directors approves its water rates each fiscal year and does not have a mechanism in place to increase rates specifically as a result of drought. FINANCIAL STATEMENTS AND INDEPENDENT AUDITORS' REPORT, *supra* note 124, at 5, 11.

142. MRGCD has 33 ISO positions. *Water Distribution Division*, MIDDLE RIO GRANDE CONSERVANCY DIST., <https://perma.cc/N4VV-TDDK> (last visited Dec. 13, 2022). Bernalillo County has only one full-time employee working on agricultural assessments, per phone conversation with Clyde Ward.

143. U.S. DEP'T AGRIC., *supra* note 15. Net cash farm income of operations, on average in 2017, per farm for the Middle Rio Grande Basin counties are as follows: Santa Fe County, -\$5,452; Sandoval County, -\$513; Bernalillo County, \$3,827; Valencia County, -\$3,516; Socorro County, \$11,067; Torrance County, \$6,415. Cibola County data were withheld from the census to avoid sharing identifying data.

144. Classification of Property, New Mexico Administrative Code, 3.6.5.23 NMAC (1983).

Looking at physical infrastructure, the MRGCD is not set up well to track water use in a consistent or automated way in general, let alone for this tax program. In 2020, the District did not have a system set up like neighboring irrigator Elephant Butte Irrigation District (EBID) in southern New Mexico, which more closely tracks individual water use using FlowProbe meters and Remote Telemetry Units (RTU) at ditch turnouts.¹⁴⁵ This, combined with MRGCD's aversion to curtailing water use for any reason, led to one external report written for New Mexico's Interstate Stream Commission to state that "no other irrigation district in New Mexico attempts to provide unlimited access to water to its members while having no mechanisms to measure or estimate its water deliveries to its members."¹⁴⁶

All these factors culminate in the fact that no institutional setup was initially implemented for system-wide management when the tax law was passed. The Legislature did not allocate funding, create a mandate for managing the program, or lay out a comprehensive framework for how the law should be implemented.¹⁴⁷ Retroactively initiating a system like this without guidance or financial support from the Legislature would no doubt be a daunting task for municipal agencies to enact and would likely require additional staffing. Acting without legislative guidance could also potentially create legal issues down the road for municipalities who incidentally operate beyond the scope of the law in attempting to initiate a more comprehensive management system.

B. Criticism, Comparisons and Attempts at Change

Scholars John E. Anderson and Richard W. England at the Lincoln Institute of Land Policy have done substantial research in comparing agricultural valuation programs across the country.¹⁴⁸ They have criticized such programs on a number of issues, including: too-lenient barriers to ward off inappropriate enrollment; penalties that are too inconsequential to discourage manipulation; and the high monetary cost of the programs for municipal government: "Policy makers need to ask whether or not wealthy taxpayers with high incomes deserve substantial tax breaks for owning rural land."¹⁴⁹

Critique of the low qualification requirements are not unfounded. Anderson and England found that many states have a minimum acreage requirement that ranges from 3 to 160 acres.¹⁵⁰ In New Mexico, only one acre is required.¹⁵¹ Some states have an annual agricultural income requirement to maintain the special valuation, using metrics like gross farm income or annual sales receipts for proof.¹⁵² In New Mexico,

145. *How Irrigation Systems Measure Water Delivery*, *supra* note 125.

146. GAUME, *supra* note 127.

147. *See* N.M. STAT. ANN. § 7-36-20 (2021).

148. *See generally* JOHN E. ANDERSON & RICHARD W. ENGLAND, *USE-VALUE ASSESSMENT OF RURAL LAND IN THE UNITED STATES* 123–43 (2014).

149. *Id.* at 123.

150. *Id.* at 22.

151. BERNALILLO CNTY. ASSESSOR'S OFF., *supra* note 77, at 1–2.

152. ANDERSON & ENGLAND, *supra* note 148, at 24.

no such minimum is required.¹⁵³ Some states penalize owners who develop lands that had previously been granted an agricultural valuation, which strongly supports the spirit of keeping rural land rural. As noted by Anderson and England, at least 28 states have rules like this in place.¹⁵⁴ One way this is administered is by charging the landowner the difference in foregone property taxes for a specified period of years.¹⁵⁵ However, these penalties may not be significant enough to dissuade development, and some states do not have them at all. New Mexico originally had a stipulation that disqualified land that was being held for speculative development, but that was removed in 1997.¹⁵⁶ However, the state does have a penalty for landowners who fail to notify the Bernalillo County Assessor's office once their property ceases to be used for agricultural purposes—if the County realizes this has occurred, a penalty may be incurred of either \$25, or 25% of the difference between taxes paid and what the taxes would have been without the agricultural valuation (the greater of the two).¹⁵⁷

While New Mexico's qualification requirements are lax compared to many other states, this does not necessarily equate to neglect. For the last four years, the County has visited roughly one-third of ag-valued properties annually despite limited staffing; the agricultural valuation was removed from a total of 340 properties from 2017–2019.¹⁵⁸

In 1968, UNM law student Griffin offered his issues with the law soon after its passage,¹⁵⁹ and the subsequent court cases seem to support his criticisms concerning the need for clear intent and accountability.¹⁶⁰ Sorting through intent is even harder today, with changing circumstances. For example, the Western Landowners Alliance (WLA), an organization that aims to sustain western working lands, has done considerable work in trying to adapt the Greenbelt law to accommodate changing times. Leadership from the group contributed to a 2015 report from Colorado State University's Department of Agricultural and Resource Economics, which suggested that “[s]tricter enforcement of current laws is expected to reduce non-market natural resource values and increase the net tax burden [across

153. See N.M. STAT. ANN. § 7-36-20 (2021); BERNALILLO CNTY. ASSESSOR'S OFF., *supra* note 77. Neither the state statute nor administrative code list any income requirements for irrigated agricultural land.

154. ANDERSON & ENGLAND, *supra* note 148, at 25. See ALA. CODE § 40-7-25.3 (2021); DEL. CODE tit. 9 § 8335 (2022) as examples of how some states handle development penalties.

155. ANDERSON & ENGLAND, *supra* note 148, at 25.

156. H.B. 1112, 1997 Leg., 43rd Sess. (N.M. 1997). This amendment to the statute deleted the language stating that “[t]he fact that land was devoted to agricultural use in the preceding year is not of itself sufficient evidence to support a finding of bona fide primary agricultural use when there is evidence that the agricultural use was subordinate to another use or purpose of the owner, such as holding for speculative land subdivision and sale, commercial use of a nonagricultural character, recreational use or other nonagricultural purpose.”

157. BERNALILLO CNTY. ASSESSOR'S OFF., *supra* note 77, at 9.

158. BERNALILLO COUNTY PROPERTY VALUATION MAINTENANCE PROGRAM & ANNUAL REPORT (2017–2020) *in* email with document attachments from Gloria Artz, Executive Assistant to the Assessor, Bernalillo County and lead author (Mar. 19, 2022, 2:28pm PST) (on file with lead author).

159. Griffin, *supra* note 7.

160. See *generally* Bernalillo County v. Ambell, 1980-NMSC-062, 94 N.M. 395, 611 P.2d 218; Alexander v. Anderson, 19999-NMCA-021, 126 N.M. 632, 973 P.2d 884.

the relevant jurisdiction] due to conversion from agriculture to residential development.”¹⁶¹

In New Mexico, at least a dozen, mostly unsuccessful bills have been introduced over the last three decades suggesting varying changes to the program (see Table 2). Three bills are of particular interest to this study; all of them focus on keeping or expanding land that qualifies for the agricultural valuation. There has been no specific effort to account for water used as a result of the agricultural valuation.

- In 2015, SB 112 was passed into law. It allowed fallowed land to qualify for the program if the land was: resting in order to maintain its agricultural capacity or resting as a direct result of moderate drought confirmed by the USDA in the County.¹⁶²
- In 2015, SB 330 failed to pass. It attempted to allow land that “provides ecological services for public benefit as an agricultural use of land” to qualify for the agricultural valuation.¹⁶³
- In 2017, SB 459 failed to pass. It attempted to add an “open space” option based on things like restrictive covenants, permanent conservation restrictions, or enforceable deed restrictions. Access to an acequia or well was required. The land’s current use would have been required to fulfill one of several goals, one of which was to “protect water supply or otherwise allow for the permeation of water into the ground.”¹⁶⁴

Elsewhere, some western states have taken different approaches with agricultural tax valuation programs. California has the Open Space Subvention Act and Williamson Act, which help offset property tax revenue depletions through state grants paid to participating counties, and offer agricultural valuation subsidies to private landowners, respectively.¹⁶⁵ The Williamson Act functions similarly to New Mexico’s Greenbelt law. Nevada included language surrounding open space and the public benefits it provides from the beginning, in its suite of special use valuation laws originally enacted in 1975:

The legislature hereby declares that it is in the best interest of the state to maintain, preserve, conserve and otherwise continue in existence adequate agricultural and open space lands and the vegetation thereon to assure continued public health and the use and enjoyment of natural resources and scenic beauty for the economic and social well-being of the state and its citizens.¹⁶⁶

161. DANIEL VILLAR ET AL., ECONOMIC IMPLICATIONS OF DIFFERENTIAL TAXATION FOR AGRICULTURE IN THE INTERMOUNTAIN WEST: ISSUES AND ALTERNATIVES 50 (2015).

162. S.B. 112, 2015 Leg., 52nd Sess. (N.M. 2015).

163. S.B. 330, 2015 Leg., 52nd Sess. (N.M. 2015).

164. S.B. 459, 2017 Leg., 53rd Sess. (N.M. 2017).

165. CAL. GOV’T CODE § 16140 (2022); *Open Space Subvention Act*, CAL. DEP’T CONSERVATION, <https://perma.cc/84S9-XFT5> (last visited Dec. 21, 2022, 10:23 AM).

166. NEV. REV. STAT. § 749.010 (1975). This includes other programs outside of the agricultural valuation.

C. Where Do We Go from Here?

This investigation provides an initial analysis of a law that is painfully outdated and yet has wide-reaching modern ramifications in New Mexico generally, but more particularly for urban Bernalillo County. Our objective is not to villainize the program nor the agencies that administer it, but to encourage clarification and better data tracking to support water conservation, especially as climate projections show decreased and more variable surface water supplies.¹⁶⁷ Viable updates to the special valuation program could include both incentive and regulatory-based actions.

Amount or percentage-based sliding scales for agricultural land tax rates could be implemented based on factors like irrigation efficiencies, household income, whether farming is a primary income source, acreage, and crop type. Qualifying factors could be either expanded or restricted. Language surrounding water use could be authored.

A simple starting place is to phase out the “yard” properties (and then from there detailed investigations of properties listed as “yards + other categories”). Lawns or turfgrass do not fall within the statute’s qualifying categories by any interpretation,¹⁶⁸ so to start with the 101 properties and 98 acres that MRGCD deem *solely* as yards makes sense. This is a clear and non-complex step on a manageable amount of land for Bernalillo County to cover. From there, other yarded properties receiving the special use valuation could be investigated.¹⁶⁹

Another proposal worth considering is moving toward something akin to Nevada’s verbiage. This could fit Bernalillo County’s situation well, since it appears much of the included land in the County, particularly in the greener areas of the North Valley, are better categorized as open space than subsistence farming or true agriculture. This would effectively preserve the open space and non-market benefits that are valued highly in Bernalillo County, while remaining within the bounds of the statute.

Fundamental, functional changes to New Mexico’s Greenbelt law would require legislative action and could therefore be a lengthy ordeal, as evidenced by the recent slew of failed bills in the state.¹⁷⁰ However, in the interim, there is room within the bounds of the law’s current parameters for changes on a cooperative basis. Irrigation system operators for the District could incorporate the County’s program data and note in their field logs any properties that appear to have fallen out of agricultural use. ABCWUA and the District could compare water use information to create a more comprehensive data set, which would be annually provided and publicly available. Data-sharing is an easily utilized tool as it simply requires combining the land and water data sets where both have overlapping attributes and both agencies report using the same GIS software.

Water scholars often look to Dr. Elinor Ostrom, late recipient of the 2009 Nobel Prize in Economic Sciences, when contemplating common-pool or collective natural resource issues. Ostrom helped develop the concept of polycentric governance in dealing with finite resources—the idea that a decentralized, non-

167. U.S. BUREAU RECLAMATION, *supra* note 10.

168. N.M. STAT. ANN. § 7-36-20 (2021); BERNALILLO CNTY. ASSESSOR’S OFF., *supra* note 77.

169. It is also worth considering that there are a set of “yards” outside our intersecting categories—yards that are receiving this tax break but are not irrigated by the District.

170. *See* Table 1.

hierarchical approach could be successful in decision-making and resource management.¹⁷¹ This approach argues that interacting elements of governance, each with independent responsibilities and goals, can in fact achieve beneficial collective ends. It stands in contrast to those who argue for what has been called “gargantua”—a centralized authority with centralized power over the area of interest.¹⁷² In the case of New Mexico’s Greenbelt law, management by agencies at a local level can be successfully utilized to promote better use and administration of the program without the need for any one centralized authority. As discussed previously, there are clear incentives for Bernalillo County and MRGCD to work together on this issue: recaptured tax revenues and recaptured water resources.

Part of Ostrom’s advocacy for local management regimes is because of the increased level of flexibility permitted within them.¹⁷³ A smaller, local arena can be used to experiment with different ideas, learn the costs and benefits that result, and more easily iron out problems since a smaller participant pool is involved.¹⁷⁴ This is reflected in her greenhouse gas emissions policy research,¹⁷⁵ and we propose it is also applicable to water resources and this New Mexico law. Ostrom also urges more immediate action rather than trying to wait for a broader, top-down solution:

The likelihood of developing an effective, efficient, and fair system to reduce greenhouse gas emissions that can be rapidly initiated at the global level appears to be very low. Given the severity of the threat, simply waiting for resolution of these issues at a global level, without trying out policies at multiple scales because they lack a global scale, is not a reasonable stance.¹⁷⁶

If, as commonly noted, climate change is writ large in water resource availability, then we interpret Ostrom as pushing for re-examining rules and laws from the past in light of their water use implications today. As such, within Bernalillo County, scrutiny of the Greenbelt law is every bit as critical as vigilance in reviewing, say, the ABCWUA municipal conservation programs.¹⁷⁷ In this spirit, the District and County can implement some changes while waiting for potential statutory updates in the coming years. Continued and compounding effects of climate change are being observed, and there is growing uncertainty from scholars and policymakers focused on rivers in the southwestern United States over whether society is capable of making the needed changes in time, before reaching a catastrophic point.¹⁷⁸

171. ERIK NORDMAN, *THE UNCOMMON KNOWLEDGE OF ELINOR OSTROM* 33–4 (2021).

172. See generally Vincent Ostrom et al., *The Organization of Government in Metropolitan Areas: A Theoretical Inquiry*, 55 AM. POL. SCI. REV. 831, 831–42 (1961).

173. NORDMAN, *supra* note 171, at 33–4, 116–7.

174. *Id.*

175. Elinor Ostrom, *A Polycentric Approach for Coping with Climate Change* 550–7 (World Bank, Dev. Econ., Policy Research Working Paper 5095, 2009).

176. *Id.*

177. See generally ALBUQUERQUE BERNALILLO CNTY. WATER UTIL. AUTH., WATER 2120: SECURING OUR WATER FUTURE WATER CONSERVATION PLAN UPDATE (2018).

178. At the Wallace Stegner Center 27th Annual Symposium, convened March 17–18, 2022, by the Wallace Stegner Center for Land, Resources, and the Environment and the Water & Tribes Initiative, Brad Udall (Water and Climate Research Scientist) stated “my biggest fear is that it’s easier to let the system crash than it is to find the painful solutions that are needed to manage an 11-million-acre foot river.” Udall’s quote was regarding the Colorado River, not the Rio Grande, but the systems face similar

New Mexico's Greenbelt law is no longer serving the audience for which it was intended, nor in the way it was intended. An integration must take place between these areas of land and water policy to holistically consider the law, the region's values, and the need for water conservation. In light of climate change, and especially in the peri-urban fringe of central New Mexico, it is vital to include agriculture, in all its dimensions, and future development in all water conservation dialogues. There are several areas in which future research would be beneficial regarding this statute:

- Exploring new tools, such as OpenET, regarding agricultural land in the Middle Rio Grande Basin. OpenET may prove useful in gaining a more detailed comprehension of how much surface water is used for irrigation in MRGCD's jurisdiction.¹⁷⁹
- Completing a broader program comparison between central New Mexico and southern New Mexico, where Elephant Butte Irrigation District (EBID) tracks individual irrigation water use at a closer level.¹⁸⁰
- Completing a regional demographic analysis on agricultural property and ownership. This would be useful in evaluating equitable changes to the program.
- Investigating implementation of the Greenbelt law in other N.M. counties. For example, in the Taos region its agricultural assessment program has recently undergone a shift in level of enforcement.¹⁸¹ This reassessment included the Taos County Assessor's Office, the County's Agricultural Resolution Team (ART), and the Taos Land Trust organization.
- Examining comparisons of this taxpayer-funded subsidy to other taxpayer-funded or subsidized services in the region. Looking at other county services such as libraries, municipal golf courses, or public pools would provide valuable cost-benefit context.

CONCLUSION

When New Mexico's Greenbelt law was enacted in 1967 it was already outdated, at least in the Middle Rio Grande Valley, as urbanization had been occurring for decades and subsistence farming in its classic sense was essentially gone. Thus, on one hand, someone could argue the statute is based on outdated economic and demographic data, has unclear goals, and is using shrinking water resources without accounting for them or incorporating any purposeful conservation efforts. Now, two decades into the 21st century, the Greenbelt law is effectively supporting hobby farming instead of subsistence farming. On the other hand, those

issues from a management and climate change standpoint. Univ. Utah, *Day 2 Session 2- Wallace Stegner Center 27th Annual Symposium*, YOUTUBE (Sept. 6, 2022), https://youtu.be/f8ydy8_hKfi?t=2161.

179. FORREST S. MELTON ET AL., OPENET: FILLING A CRITICAL DATA GAP IN WATER MANAGEMENT FOR THE WESTERN UNITED STATES (J. Am. Water Res. Ass'n, Technical Paper No. JAWR-20-0084-P, 2021).

180. *How Irrigation Systems Measure Water Delivery*, *supra* note 125.

181. J.R. Logan, *Continuing Reassessment Finds Most Ag Land in Taos County Inactive*, TAOS NEWS (Dec. 11, 2014), <https://perma.cc/FK48-WVEL>.

advocating for protection and maintenance of undeveloped land¹⁸² assert that this custom and culture farming still provides an important suite of benefits that is worthy of a tax reduction (or subsidy) as a kind of payment for ecosystem services, which benefit the public more generally.

We take no side in that debate, beyond arguing there are water policy implications to this tax law, and it should thus be viewed and discussed as a water policy issue. It is no longer responsible stewardship for policies that affect water resources to avoid scrutiny, as New Mexico's future planning and resiliency efforts move further into an era of aridification and shrinking water supplies. The region is warmer and has more variable precipitation than it has historically, and some areas now require up to 140% of normal headwaters snowpack to result in normal runoff levels.¹⁸³ In 2021, a year after the data were collected for this investigation, the Rio Grande through Bernalillo County fell to the lowest levels since the early 1980s.¹⁸⁴ MRGCD's irrigation season had to be shortened,¹⁸⁵ and the city of Albuquerque had to rely on groundwater for municipal use.¹⁸⁶

In a 2021 interview with the lead author of this study, former UNM law student James Griffin, in looking back at his *Natural Resources Journal* article from 53 years ago and discussing the persisting policy gaps, said “[w]e both know that global climate change has made the disconnects more obvious and severe. Land use planning may give lip service to water supply but doesn't do anything to stop them from approving larger and larger developments.”¹⁸⁷ Griffin also stressed the importance of getting “the attention of those who make legislation and establish policy in water use and allocation” regarding the Greenbelt law. Recent years have brought increased interest to these land-water policy disconnects, along with recognition for the need to integrate the two areas.¹⁸⁸ Conversation and scrutiny have increased regarding arid metropolitan areas and their intent to continue developing and growing. The results generated by this study demonstrate an acute need to reevaluate and update the Greenbelt law in New Mexico's Middle Rio Grande Basin.

182. For the sake of this investigation, the terms “green space” and “open space” are used in a general sense to identify undeveloped land that provides a suite of amenities to the surrounding community. These may include things like nature trails, bird habitats, or scenic areas commonly used to recreate.

183. Dave Hovde, *Some State Officials Are Calling the Latest Drought 'Unprecedented,'* KSBY CALIFORNIA'S CENT. COAST, <https://perma.cc/24XQ-WZNT> (Aug. 5, 2021, 1:55 PM).

184. E-mail from Anne Marken, Water Operations Division Manager, MRGCD, to Annalise Porter (July 26, 2022, 2:23 PST) (on file with lead author). River connectivity was lost in the Albuquerque reach of the MRGCD's jurisdiction for several weeks in 1983.

185. The month-late irrigation startup was discussed during the MRGCD April 12, 2021, Board of Directors meeting. Minutes of the 2,174th Regular Meeting of the Board of Directors of the Middle Rio Grande Conservancy District 13, 16 (Apr. 12, 2021) (meeting minutes on file with lead author).

186. According to the Albuquerque Bernalillo County Water Utility Authority, “Groundwater is used to supplement surface water supplies to meet peak demands and to provide supply during drought periods or other times when surface water is not available . . . In calendar year 2021, the Water Authority's potable water resources use consisted of 74% from groundwater and 26% from San Juan-Chama surface water.” See ALBUQUERQUE BERNALILLO CNTY. WATER UTIL. AUTH., ANNUAL INFORMATION STATEMENT 6 (2022).

187. Unrecorded telephone interview with James D. Griffin, former University of New Mexico School of Law student (July 27, 2021). See Griffin, *supra* note 7 for work included in this study.

188. Bates, *supra* note 12.

Table 4: Legislative Activity Over the Last 25 Years

N.M. Stat. § 7-36-20 Legislative activity from 1997-2022 ¹⁸⁹			
Year	Bill	Status	Summary
1997	HB 1112	Passed	Presumption created that land remains entitled to valuation “if the land was valued as ag in either or both of the two tax years preceding the year in which application is made and the use has not changed”
2004	HB 537	Not passed	Would have increased number of years required before it is assumed that the land remains entitled to ag valuation
2005	HB 867	Passed	Added “production of captive deer or elk” and hunting to the qualifying requirements
2013	SB 510	Passed	Adjusted timing of application due dates
2014	SB 248	Not passed	For land no longer in ag use, would apply a tiered, gradual return to full tax bill to avoid an exponential jump in value that may be unaffordable for a property owner
2014	HB 301	Not passed	Would adjust the way a County Assessor processes and notifies of the removal of agricultural assessments
2015	SB 112	Passed	Expanded qualifying factors to allow following of agricultural land for: resting to maintain agricultural capacity and as a direct and confirmed result of drought
2015	SB 330	Not passed	Would allow land that “provides ecological services for public benefit as an agricultural use of land” to qualify
2017	SB 459	Not passed	Would create allowance for “open space” to qualify, based on conservation easements, enforceable deed restrictions, etc. Would allow a protection of water supply as qualifying use.

189. H.B. 1112, 1997 Leg., 43rd Sess. (N.M. 1997); H.B. 537, 2004 Leg., 46th Sess. (N.M. 2004); H.B. 867, 2005 Leg., 47th Sess. (N.M. 2005); S.B. 510, 2013 Leg., 51st Sess. (N.M. 2013); S.B. 248, 2014 Leg., 51st Sess. (N.M. 2014); H.B. 301, 2014 Leg., 51st Sess. (N.M. 2014); S.B. 112, 2015 Leg., 52nd Sess. (N.M. 2015); S.B. 330, 2015 Leg., 52nd Sess. (N.M. 2015); S.B. 459, 2017 Leg., 53rd Sess. (N.M. 2017); S.B. 350, 2017 Leg., 53rd Sess. (N.M. 2017); H.B. 163, 2018 Leg., 53rd Sess. (N.M. 2018); H.B. 332, 2019 Leg., 54th Sess. (N.M. 2019).

2017	SB 350	Not passed	Would add penalty and tax recapture clauses. Penalty would include paying the difference between taxes assessed under the special valuation, and the taxes that would otherwise have been assessed against the land, up to five years.
2018	HB 163	Not passed	Would widen the umbrella of qualifying land to include land that is not agricultural, but that is unimproved and being actively conserved or preserved from development
2019	HB 332	Not passed	Would allow "unimproved land" to qualify. Instead of using the normal calculation, this land would automatically be valued at 25% of the regularly assessed value.