

NMOSE Metering Program in the Lower Rio Grande

NEW MEXICO WATER LEADERS WORKSHOP

DECEMBER 6-8, 2023 - LAS CRUCES, NM

RYAN SERRANO

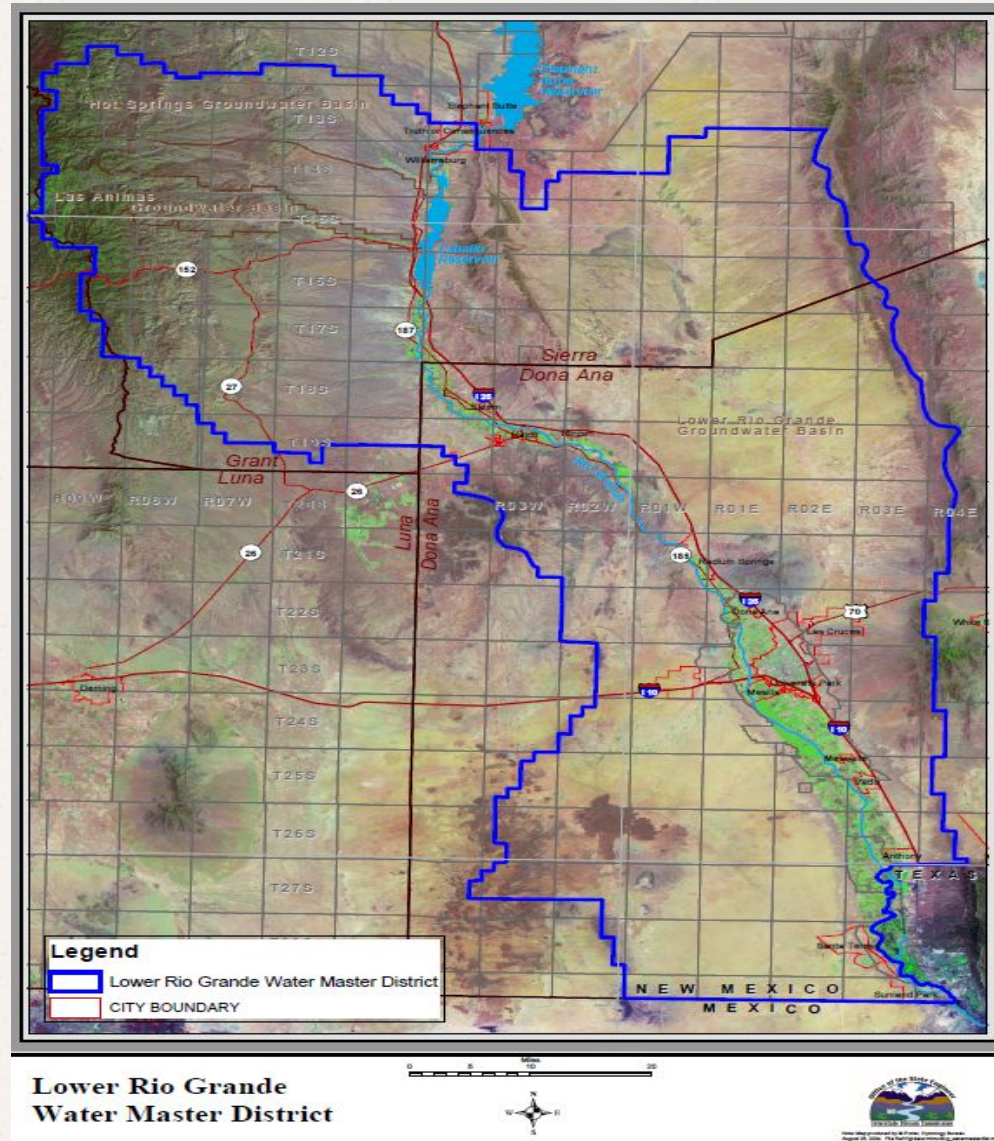
ISC LOWER RIO GRANDE MANAGER

FORMERLY - OSE LOWER RIO GRANDE WATER MASTER

Metering Timeline & Pertinent History

2004	New Mexico State Engineer Order No. 169, Creation of the Water Master District
2004	New Mexico State Engineer Order No. 168, Metering Order
2005	New Mexico State Engineer Order No. 172, First Amended Metering Order
2007	New Mexico State Engineer Order No. 180, Supplemental Metering Order
2009	LRG Metering Order Fully Implemented
2009	First full year of LRG meter data
2011	LRG Adjudication - SSI 101 Settlement/Final Judgment quantifies irrigation pumping limits
2012	Water Master starts to enforce irrigation pumping limits

LRG Water Master District- Geographic Boundary



State Engineer Orders- Metering Orders:

- All Wells Required to be Metered. In accordance with designated standards.
- Exception for wells that serve single household domestic or livestock purposes.
- Quarterly meter reporting required.

OFFICE OF THE STATE ENGINEER
STATE OF NEW MEXICO

IN THE MATTER OF THE REQUIREMENTS)
FOR METERING GROUNDWATER WITH-)
DRAWALS IN THE LOWER RIO GRANDE)
WATERMASTER DISTRICT, NEW MEXICO)

Order No. 158

ORDER

WHEREAS, New Mexico law declares the channels, artesian basins, reservoirs or lakes, havin belong to the public and are subject to appropriatio 72-1-1; and

WHEREAS, the State Engineer has a statu measurement, appropriation, and distribution the w 2-1 in accordance with the prior appropriation doct law, N.M. Const. art. XVI; NMSA 1978, § 72-1-2;

WHEREAS, the State Engineer may adopt water and promoting expedited marketing and trans NMSA 1978, § 72-2-9.1; and

WHEREAS, the unauthorized use of water willful waste of surface or underground water to th a misdemeanor, NMSA 1978, § 72-8-4; and

WHEREAS, the State Legislature has reco; administration is urgent, NMSA 1978, § 72-2-9.1; i

WHEREAS, the groundwaters of the Lowe are in hydrologic connection with the surface water

WHEREAS, a requirement for measuring a Lower Rio Grande Watermaster District will assist administering the waters of the Lower Rio Grande ;

WHEREAS, measuring and reporting of gr Rio Grande Watermaster District will promote expe by ensuring a high degree of accuracy in the determ assisting in State Engineer analysis of impairment, issues; and

WHEREAS, this Order as set out below, providing for measurement and reporting of groundwater uses in the Lower Rio Grande Water Master District, will assist

METERING OF ALL GROUNDWATER USES IN THE LOWER RIO GRANDE WATERMASTER DISTRICT: A totalizing flow meter, in accordance with the standards set out in this Order, is required for every ground water well within the Lower Rio Grande Water Master District, with the exception of wells that serve the household or domestic uses of a single household, or the irrigation of one acre of noncommercial trees, lawn or garden, or are used for the sole purpose of watering livestock in a grazing operation. Nothing herein shall limit the authority of the State Engineer to require, at a later date, that water uses currently excluded from the requirements of this order be metered. Nothing herein shall limit the authority of the State Engineer to require specific types of meters as a condition of approval for any permit granted by the State Engineer. If the State Engineer procures meters, they shall be purchased from the State Engineer subject to the State Engineer's funding terms. No owners of groundwater rights may divert from wells covered by this Order after March 1, 2006, unless such wells are metered in accordance with the specifications described in this Order.

TX v. NM #141
New Mexico Exhibit
NM_EX-430

TX v. NM #141
Trial Exhibit
US-486

NM_00075344

US-0486_0001

2007 Metering Order-Enforcement Steps

TX v NM #141
New Mexico Trial Exhibit
NM-0433

OFFICE OF THE STATE ENGINEER
STATE OF NEW MEXICO

IN THE MATTER OF THE REQUIREMENTS)
FOR METERING GROUNDWATER WITH-)
DRAWALS IN THE LOWER RIO GRANDE) Order No. 180
WATERMASTER DISTRICT, NEW MEXICO)

SUPPLEMENTAL ORDER

WHEREAS, on December 3, 2004, the State Engineer created the Lower Rio Grande Water Master District ("District") for the administration of rights to the use of groundwater from the Lower Rio Grande groundwater basin of New Mexico and authorizing the appointment of a Lower Rio Grande Water Master ("Water Master") for the purpose of administration and apportionment of the groundwaters of the District; and

WHEREAS, on December 3, 2004, the State Engineer entered Order No. 168 providing for measuring and reporting of groundwater diversions in the Lower Rio Grande Water Master District and further ordering that all required metering devices be in place and operational no later than March 1, 2006; and

WHEREAS, on December 20, 2005, the State Engineer entered the First Amended Metering Order, Order No. 172 (hereinafter "Lower Rio Grande Metering Order" or "Order"), amending his December 3, 2004 order; and

WHEREAS, in December, 2005, the State Engineer, through his District IV Office in Las Cruces, sent some 9,567 written notices to well owners in the Lower Rio Grande Water Master District giving them notice of the promulgation of the Order, summarizing its requirements and setting out the deadlines contained in the Order; and

WHEREAS, the March 1, 2006 deadline by which metering devices required by the Lower Rio Grande Metering Order must be in place and operational has passed; and

WHEREAS, the Lower Rio Grande Metering Order provides that the State Engineer may supplement or amend the Order to accommodate specific proposals to implement metering of all groundwater diversions in the Lower Rio Grande Water Master District; and;

WHEREAS, the Elephant Butte Irrigation District and Salopek 6U Farms, Inc., sued the State Engineer over the implementation of the Order, and the settlement agreement concluding said lawsuit provided that the Order should be supplemented with the procedures to enforce compliance with the Order and by the deletion of a portion of the Order pertaining to Reporting Requirements, and that neither the Order nor this supplement shall be challenged by the Elephant Butte Irrigation District or Salopek.

NM-0433-0001

NM_00018307

NOW THEREFORE, IT IS ORDERED that the following procedures shall be followed for enforcement of compliance with the Lower Rio Grande Metering Order:

STEP I: Field Inspection

The Water Master or members of his or her staff shall conduct a field inspection of each groundwater point of diversion at issue, following the procedures set forth below:

- (a) Non-compliance tags shall be attached to out-of-compliance groundwater points of diversion at the time of a field check; and
- (b) The inspecting staff member shall complete a field check form and attach photographs of the unmetered diversion.

STEP II: Notice to Owner

The Water Master shall send written notice, by first-class mail, to the owner of an out-of-compliance point of diversion within five business days of the field inspection. The notice shall inform the owner that the owner is out of compliance with the Lower Rio Grande Metering Order and include an explanation of how to request a variance as provided for by the Order.

STEP III: Owner Response to Notice

If, within thirty days of the date of mailing the Notice to Owner, the owner contacts the Water Master to seek a variance, or indicates, by clear proof of specific steps taken, a good faith effort to comply with the Lower Rio Grande Metering Order, then the Water Master shall stay any further enforcement for a reasonable and appropriate time. The Water Master shall provide to the owner a new deadline by which to comply.

If the owner fails to respond to the notice within 30 days from the date of mailing, or does so in a manner that does not show a good faith attempt to comply with the Lower Rio Grande Metering Order, or if his request for a variance is refused and his non-compliance continues, then the Water Master shall refer the matter to the Office of the State Engineer Administrative Litigation Unit.

STEP IV: Issuance of Compliance Order

Upon referral of the matter to the Administrative Litigation Unit, no sooner than 40 days after the mailing of the notice to owner, the Office of the State Engineer Water Resources Allocation Program shall execute a compliance order. The Administrative Litigation Unit shall serve the

compliance order in accordance with NMSA 1978, Section 72-2-18, and include a cover letter.

STEP V: Response to Compliance Order

If the owner requests in writing an administrative hearing in response to the compliance order within thirty days of the owner's receipt of the compliance order, then the Administrative Litigation Unit shall request a hearing pursuant to NMAC 19.25.2., and shall further, when the outcome of said hearing becomes final, file an enforcement action in the Water Court in the appropriate judicial district to enforce the compliance order and for other appropriate remedies as provided for by NMSA 1978, Section 72-2-18.

NOW THEREFORE, IT IS FURTHER ORDERED that the last sentence of the section "Reporting Requirements" of the First Amended Metering Order, which states that "All over diversions of water made in one accounting year shall be made up during the accounting year following the year in which the over diversions occurred," is deleted.

WITNESS my hand and seal of office this 28th day of March, 2007.



John R. D'Antonio, Jr.
JOHN R. D'ANTONIO, JR., P.E.
State Engineer

REVIEWED and APPROVED as to legal content the 21st day of March, 2007.

DL Sanders
DL Sanders
Chief Counsel
Office of the State Engineer

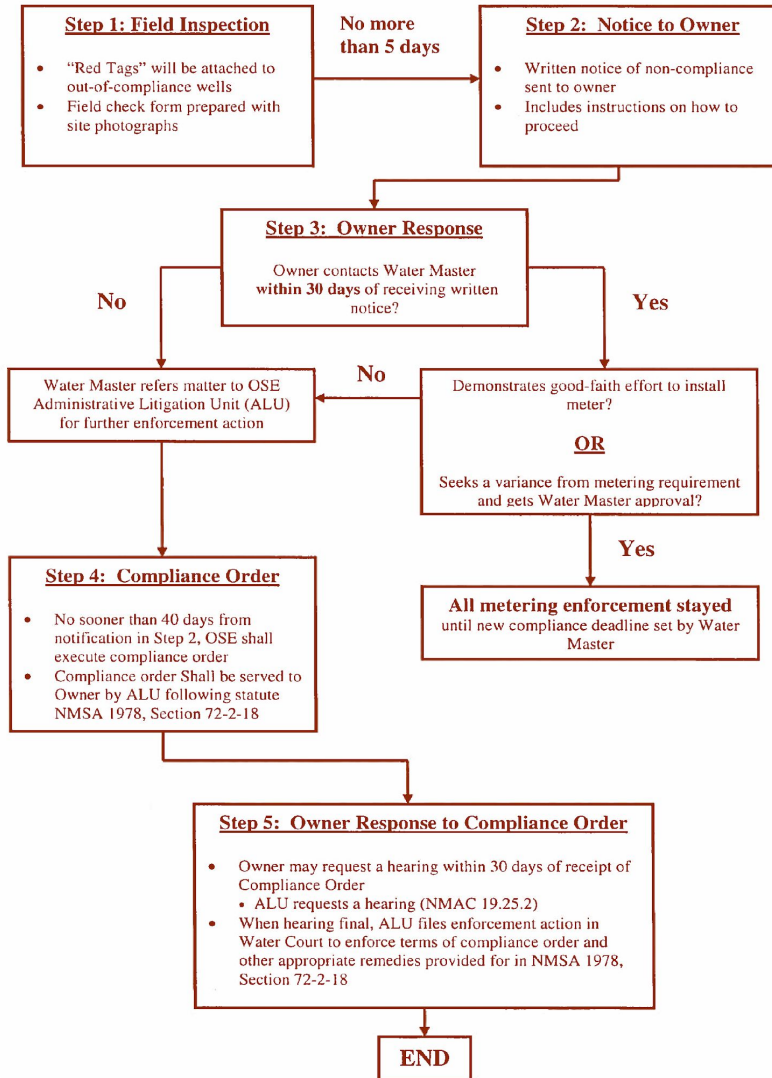
NM-0433-0002

NM_00018308

NM-0433-0003

NM_00018309

Metering Order Enforcement Process





WR File Number: LRG 00780 1 Subbasin: LRS Cross Reference: -
 Primary Purpose: IND INDUSTRIAL
 Primary Status: ADJ ADJUDICATED
 Total Acres: 0 Subfile: LRS-28-022-9001 Header: A
 Total Diversion: 2824.74 Cause/Case: -
 Owner: EL PASO ELECTRIC COMPANY
 Contact: JESUS JIMENEZ

Documents on File

Trn #	Doc	File/Act	Status			From/To	Acres	Diversion	Consumptive
			1	2	Transaction Desc.				
get image list 674685	CLW	2021-02-08	ACT	APR	LRG-780-POD24	T	0	0	
674685	CLW	2021-02-08	ACT	APR	LRG-780-POD24	F	0	0	
680926	ADM	2020-10-23	PMT	APR	PLUGGING PLAN	T	0	0	
674728	EXPL	2020-07-01	PMT	APR	LRG-780-POD24 & 25	T	0	0	
615274	ADM	2017-10-19	PMT	LOG	PLUGGING PLAN	T	0	0	
608141	CLW	2017-09-11	PMT	LOG	LRG-780-POD22	T	0	0	
608141	CLW	2017-09-11	PMT	LOG	LRG-780-POD22	F	0	0	
606715	EXPL	2017-05-03	PMT	APR	LRG-780-POD22 & 23	T	0	0	
585545	CLW	2016-08-18	PMT	APR	LRG-780-POD20	T	0	0	
585545	CLW	2016-08-18	PMT	APR	LRG-780-POD20	F	0	0	
591261	ADM	2016-07-19	PMT	APR	PLUGGING PLAN	T	0	0	
586354	ADM	2016-03-17	PMT	APR	PLUGGING PLAN	T	0	0	
448078	ORDER	2009-04-01	ADJ	PRC	LRG 00780 1	T	0	2824.74	

Current Points of Diversion

POD Number	Well Tag	Source	Q (NAD83 UTM in meters)						Other Location Desc		
			64	Q16	Q4	Sec	Tws	Rng		X	Y
LRG 00780		Shallow	2	3	4	01	29S	03E	349746	3520372	
LRG 00780 24	4185C					01	29S	03E	349498	3520446	DAC ACCOUNT R1602061
LRG 00780 25	NA					01	29S	03E	349578	3520491	DAC ACCOUNT R1602061
LRG 00780 POD20		Shallow	2	2	2	12	29S	03E	350001	3520018	16-02064
LRG 00780 POD22	NA	Shallow	3	3	4	01	29S	03E	349532	3520199	
LRG 00780 POD23						01	29S	03E	349497	3520199	
LRG 00780 S		Shallow	1	3	4	01	29S	03E	349468	3520507	
LRG 00780 S-4		Shallow	4	2	2	12	29S	03E	350135	3519853	
LRG 00780 S-5		Shallow	3	2	2	12	29S	03E	349834	3519838	
LRG 00780 S-6		Shallow	2	1	2	12	29S	03E	349704	3520032	
LRG 00780 S-9		Shallow	1	1	2	12	29S	03E	349442	3520007	

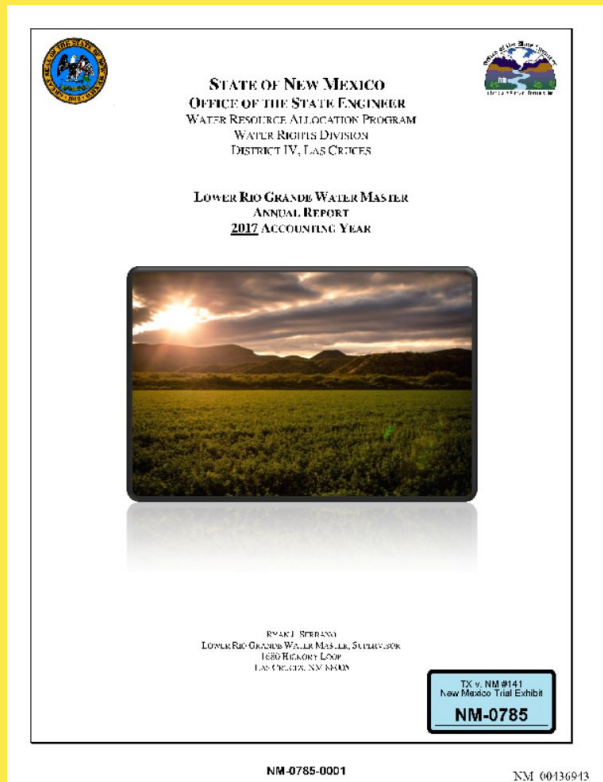
Priority Summary

wrrs.ose.state.nm.us/nmwrrs/ReportDispatcher?type=WRHTML&name=WaterRightSummaryHTML.jrxml&basin=LRG&nbr=00780&suffix=1

W.A.T.E.R.S. Database

Tracking Water Rights and Groundwater Diversions

Metering Program Success



- Water Master currently administering ~3,000 actively metered wells.
 - Any un-metered wells are the subject of active enforcement actions.
- Reporting of Meter data to Water Masters
 - Annual reporting: Good (>90%)
 - Water Master follow-up procedures ensures full data set
- Water Master inspects and tests meters on a regular basis
 - Up to 10% or 300 wells tested annually to ensure proper meter function and accuracy
- Ability to enforce court ordered diversion limits.
- Annual Reporting
 - Since 2009 the Water Master has published annual reports detailing water master activities and metered groundwater use within the Water Master District.



Three (3) Year Comparison and Summary of Metered Groundwater Withdrawals in the Lower Rio Grande Basin (Acre-Feet)



Category	2020		2021		2022		3-Year Total	
	Acre-Feet	Percentage	Acre-Feet	Percentage	Acre-Feet	Percentage	Acre-Feet	Percentage
Irrigation	218,231	82.11%	264,430	84.77%	239,098	84.53%	721,759	83.87%
Drinking Water: Municipal, Mutual Domestic, and individual Domestic Supply <i>(includes 2,400 AF of estimated unmetered domestic)</i>	40,164	15.11%	39,234	12.58%	37,234	13.16%	116,632	13.55%
City of Las Cruces	21,401		21,049		20,845			
New Mexico State University	3,087		3,080		1,964			
Mutual Domestic	12,204		11,665		10,860			
Other Drinking Water	3,472		3,440		3,565			
Commercial/Industrial/Dairy	6,662	2.51%	7,879	2.53%	6,027	2.13%	20,568	2.39%
All Other Uses	738	0.28%	400	0.13%	491	0.17%	1,629	0.19%
TOTALS	265,794		311,943		282,850		860,588	100%

Reasonable efforts have been made by the New Mexico Office of the State Engineer (OSE) to verify the accuracy of this data. However, this data may be subject to change if and when more information becomes available. 3-21-2023 RJS, LRG Water Master, Manager



Lower Rio Grande Sub-Basin Breakdown of Metered Groundwater Withdrawals (Acre-Feet) - 2022



Category	RINCON		NMES		SMES		OUTLY	
Irrigation	52,549	98.26%	46,304	63.30%	139,180	92.61%	1,174	20.13%
Drinking Water: Municipal, Mutual Domestic, and individual Domestic Supply <i>(includes 2,400 Ac-Ft of estimated unmetered domestic/all four sub-basins)</i>	785	1.47%	25,602	35.00%	6,891	4.58%	3,759	64.48%
Commercial/Industrial/Dairy	139	0.26%	1,170	1.60%	3,963	2.64%	755	12.95%
All Other Uses	7	0.01%	79	0.11%	260	0.17%	142	2.43%
Sub-Basin TOTAL(s)	53,480	100.00%	73,155	100.00%	150,294	100.00%	5,831	100.00%
BASIN WIDE AGRREGATE								
			Metered Groundwater		% of Total			
	RINCON		53,480		18.91%			
	NMES		73,155		25.87%			
	SMES		150,294		53.15%			
	OUTLY		5,831		2.06%			
	TOTAL		282,760		100.00%			

Reasonable efforts have been made by the New Mexico Office of the State Engineer (OSE) to verify the accuracy of this data. However, this data may be subject to change if and when more information becomes available. 3-23-2022 RJS, LRG Water Master. Manager

Questions....