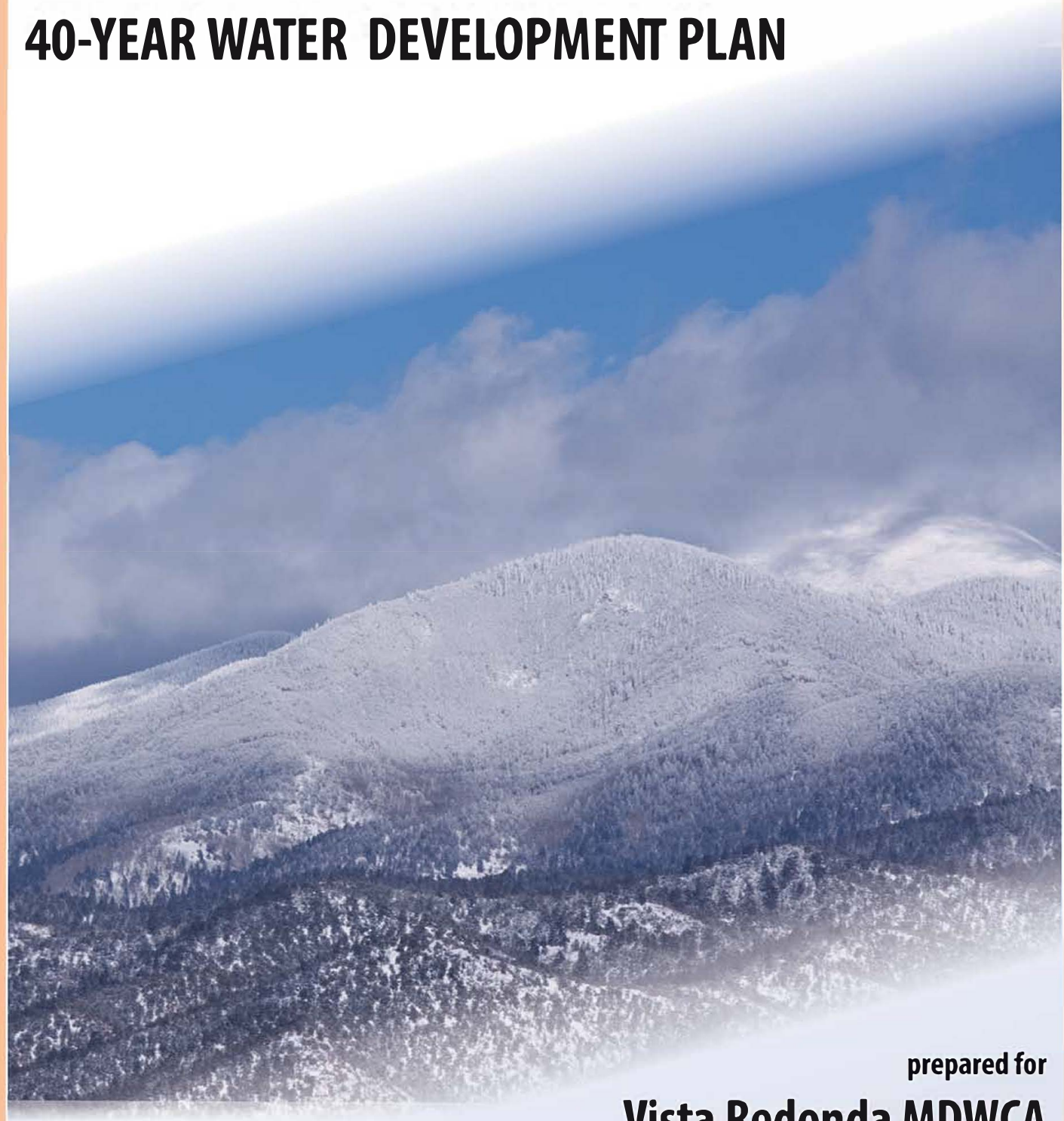
VISTA REDONDA MDWCA

40-YEAR WATER DEVELOPMENT PLAN



prepared for

Vista Redonda MDWCA

Santa Fe County, New Mexico

JUNE 2019

by JSAI

JOHN SHOMAKER & ASSOCIATES, INC.

VISTA REDONDA MDWCA
40-YEAR WATER DEVELOPMENT PLAN

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VISTA REDONDA MDWCA 40-YEAR WATER DEVELOPMENT PLAN

EXECUTIVE SUMMARY

The Vista Redonda Mutual Domestic Water Consumers Association (MDWCA) serves residences in the Vista Redonda subdivision located in Santa Fe County, New Mexico (Fig. 1). The subdivision first began to develop in the late 1960s with the first water-supply wells completed in 1968. The Vista Redonda MDWCA currently serves 67 residences with seven operational water-supply wells currently connected to the water system (Fig. 2, Table 1). The Infrastructure Capacity Area for Vista Redonda MDWCA includes a total of 84 residential lots that may be served (Fig. 3).

Vista Redonda owns a total of 44.08 acre-feet per year (ac-ft/yr) of water rights and permits for MDWCA use. This equates to about 0.5 ac-ft/yr per residence at full build-out. As the subdivision has achieved approximately 80 percent of full build-out over the last 50 years, it is reasonable to expect full build-out to occur within the next 40 years.

Vista Redonda MDWCA has sufficient water rights and permits to supply water to the community over the 40-year period. Development of water supply to meet current and future demand is generally based on potential regulatory/administrative constraints, as opposed to deficiency in the physical capacity of all wells, or amount of existing water rights and permits. Meeting current and future demand will require flexibility to produce water from a number of wells, including existing wells, future replacement wells, and permitted locations for new wells within the Infrastructure Capacity Area, due to the following limitations:

- Limited production rates and specific capacities at individual wells
- Intermittent occurrences of elevated total uranium concentrations and gross alpha particle activities at selected wells
- Reduced pumping to lower uranium and gross alpha particle production at selected wells
- Contamination of several well sites due to apparent infiltration and migration of near-surface water to groundwater

Regulatory/administrative constraints relate to issues that may arise as it becomes necessary for Vista Redonda to complete replacement wells and re-assign water right permits among existing and future well locations within the Infrastructure Capacity Area due to the limitations described above.

Vista Redonda's baseline water conservation measures include the following:

- Water metering, including metering of diversions from individual wells, and metering of deliveries to customers.
- Although customers are billed on an annual basis, all customers receive a monthly water statement to monitor consumption and any potential leakage.
- Water rate structure that imposes additional costs on customers that use over 163,500 gallons per year (0.5 ac-ft/yr).

The proposed Water Conservation Plan for the 40-year period includes the following:

- In the case of significant increases in non-revenue water; Vista Redonda MDWCA may consider metering unbilled water; however, non-revenue water is already extremely low.
- In the case of significant increases in consumption, Vista Redonda MDWCA may consider re-evaluation and adjustment of their water rate structure.
- Continued infrastructure improvements in order to continue to maintain low water losses.

The Water Development Plan includes implementation of the Water Conservation Plan as needed, well replacement and re-assignment of existing water rights and permits among wells, completion of new wells under existing permits, and a groundwater level monitoring program for continued management and optimization of the water supply to meet water demands over the 40-year planning period.

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ABBREVIATIONS

ac-ft	acre-feet
ac-ft/yr	acre-feet per year
AWRM	active water resource management
ft bgl	feet below ground level
gpm	gallons per minute
gpm/ft	gallons per minute
ICA	Infrastructure Capacity Area
JSAI	John Shomaker & Associates, Inc.
MDWCA	Mutual Domestic Water Consumers Association
mg/L	milligrams per liter
NMSA	New Mexico Statutes Annotated
NMOSE	New Mexico Office of the State Engineer
NPT	Nambe-Pojoaque-Tesuque
NMED	New Mexico Environment Department
NMED/DWB	New Mexico Environment Department Drinking Water Bureau
pCi/L	picocuries per liter
TDS	total dissolved solids
µS/cm	microSiemens per centimeter
µg/L	micrograms per liter

VISTA REDONDA MDWCA 40-YEAR WATER DEVELOPMENT PLAN

1.0 INTRODUCTION

Vista Redonda MDWCA contracted John Shomaker & Associates, Inc. (JSAI) to prepare a 40-Year Water Development Plan for the planning period 2019 to 2059. The primary purpose of 40-year water development planning is to assess the amount of water needed to meet current and future demand in relation to the amount of water rights and permits currently held, and available groundwater that may be produced from groundwater wells within the Vista Redonda MDWCA Infrastructure Capacity Area.

New Mexico Statutes Annotated (NMSA) Section 72-1-9 states:

> A. It is recognized by the state of New Mexico that it promotes the public welfare and the conservation of water within the state for municipalities, counties, state universities, member-owned community water systems and public utilities supplying water to municipalities or counties to plan for the reasonable development and use of water resources. The state further recognizes the state engineer's administrative policy of not allowing municipalities, member-owned community water systems, counties and state universities to acquire and hold, unused, water rights in an amount greater than their reasonable needs within forty years.
>
> B. Municipalities, counties, state universities, member-owned community water systems and public utilities supplying water to municipalities or counties shall be allowed a water use planning period not to exceed forty years, and water rights for municipalities, counties, state universities, member-owned community water systems and public utilities supplying water to such municipalities or counties shall be based upon a water development plan the implementation of which shall not exceed a forty-year period from the date of the application for an appropriation or a change of place or purpose of use pursuant to a water development plan or for preservation of a municipal, county, member-owned community water system or state university water supply for reasonably projected additional needs within forty years.

Thus, the State of New Mexico allows water systems such as Vista Redonda MDWCA to acquire and hold water rights in an amount equal to its reasonably projected needs within 40 years. The State Engineer has defined the contents of a water development plan in Section 19.26.2.19.B. NMAC of the Rules and Regulations Governing the Appropriation and Use of Surface Water of New Mexico, and these rules are also applied to groundwater. The defined contents include the following:

- summary of all water rights subject to the plan
- place and purpose of use of the identified water rights

- historical and current water use
- historical and existing population served by the identified water rights
- reasonable population projections
- implemented water conservation measures
- planned water conservation measures
- summary of the per capita water use including a comparison with the per capita water use of other similar 40-year planning entities
- reasonably projected additional needs - taking into account the variability of surface-water supply and the sustainability of groundwater supply - for water within 40 years
- any other information the State Engineer deems necessary

2.0 BACKGROUND

2.1 Previous Work

Recent reports completed for Vista Redonda MDWCA have evaluated the aquifer at the subdivision, and current conditions at water-supply wells. A 2013 report titled *Well Assessment Update for Vista Redonda Mutual Domestic Water Consumers Association, Santa Fe County, New Mexico*, provided an assessment of Vista Redonda water-supply wells in terms of production and water quality. The report also included an aquifer evaluation and estimates of groundwater in storage, water-level decline rates, and longevity of existing supply wells (JSAI, 2013). A 2016 assessment for replacement of Vista Redonda Well 4 provided more detailed analysis of the hydrogeologic units in which Vista Redonda wells are completed (JSAI, 2016).

2.2 Hydrogeologic Setting

Figure 4 presents a geologic map of the Vista Redonda MDWCA area, and Figures 5 and 6 present hydrogeologic cross-sections through the area. The primary aquifer at Vista Redonda is the alluvial slope deposits of the Tertiary-age middle to lower Tesuque Formation "lithosome A" (Read and Koning, 2004), labeled "Ttaml" and shown in light grayish tan color in Figure 4. Relatively thin, unsaturated stream terrace deposits are mapped along the topographic ridges in the area (labeled Qst and QTst in Fig. 4), and valley-fill alluvium is mapped in the major drainages (labeled Qva in Fig. 4).

The Tesuque Formation "lithosome A" aquifer consists of saturated silty sandstone with minor siltstone, mudstone, and claystone. Channel sediments up to 6 ft thick are increasingly common eastward toward the mountain front, and consist of pebbly sandstone and sandy pebble-conglomerate. Permeability generally increases toward the mountain front, reflecting the fact that channel sediments are more common. White and gray ash beds are preserved in the middle to lower Tesuque Formation. Underlying Tesuque Formation "lithosome A," deposits of the Tesuque Formation "lithosome E" and Cieneguilla Basanite mafic volcanic rocks may or may not be present (labeled Tcb - Tte in Figs. 5 and 6). The Tesuque Formation "lithosome E" consists of gray to brown, clayey-silty, very fine-grained to very coarse-grained sandstone (Koning and Read, 2010). Lithologic logs included with well records for Vista Redonda wells provide little indication of the presence of these gray sandstone and volcanic deposits, although the presence of "gray clay" below 660 ft in the log for Well 1a, and a transition to "medium grain sandstone" below 780 ft in the log for Well 3a, may represent a transition to Tesuque Formation "lithosome E." The log for Well 6 provides no indication of a lithologic transition.

Underlying the Tesuque Formation are Pennsylvanian-age rocks including limestones, gray shales, conglomerates, and non-arkosic sandstones of the Flechado Formation, Alamitos Formation, and Sangre de Cristo Formation (basal part) (Miller et al., 1963). The deepest Vista Redonda wells, Wells 3a, 5, and 6, may be completed near the base of the Tesuque Formation, although lithologic logs included with well records for these wells provide no indication that the underlying Pennsylvanian-age rocks were reached at the borehole total depth.

2.3 Basin Water-Rights Administration

Vista Redonda MDWCA is within the Nambe-Pojoaque-Tesuque (NPT) River Basin, affected by the Aamodt water rights adjudication, and designated by the New Mexico Office of the State Engineer (NMOSE) as a priority basin in New Mexico for active water resource management (AWRM).

2.3.1 Aamodt Water Rights Adjudication

In 1966, the New Mexico State Engineer brought suit against all water right claimants in the Pojoaque River Basin to determine the nature and extent of the claimants' water rights in the case *State of New Mexico ex re. State Engineer v. Aamodt*. The Aamodt Water Rights Settlement Agreement was developed through multi-party negotiations begun in 2000 between the Pueblos of Nambé, Pojoaque, Tesuque and San Ildefonso, the State of New Mexico, the United States of America, the City of Santa Fe, Santa Fe County, and representatives of non-Pueblo water users to

settle the Pueblos' water right claims in the Pojoaque Basin. An initial Settlement Agreement was signed in February 2006, and following the passage of the Aamodt Litigation Settlement Act on December 8, 2010, a final Settlement Agreement (conformed to include provisions of the Act) was signed by all parties, including the United States in its trust capacity, in March 2013 (http://www.ose.state.nm.us/Legal/settlements/Aamodt/index_aamodt.php).

2.3.2 Active Water Resource Management

AWRM refers to the essential tools and elements needed to enable the State Engineer to actively manage the State's limited water resources. The tools for AWRM include: measuring and metering, rules and regulations, creation of water districts, and appointment of water masters.

Rules for NPT AWRM are documented in 19.25.20 NMAC. General principles for use and administration of surface and groundwater in NPT are based on the designation of the basin as being fully appropriated and closed to new appropriations of surface or groundwater. The priority and the diversion amount for a Section 72-12-1 well, a pre-basin well, or well drilled under a permit from the State Engineer shall be the priority and amount adjudicated in the final decree or authorized in a subsequent permit or license issued by the State Engineer, unless the use is limited by the terms of an election under the settlement agreement. If no amount is set forth in the final decree or in a subsequent permit or license, then the amount shall be the amount of historic beneficial use of water from the well.

Vista Redonda MDWCA water rights and permits are defined under:

- *State of New Mexico ex re. State Engineer v. Aamodt*, No. CIV-6639 M, Sub-File No. DS-219, Vista Redonda MDWCA, Supplemental Order
- Subsequent NMOSE permits
- *Vista Redonda Water & Property Owners Association, Inc. v. New Mexico State Engineer*, D-101-CV-2006-02160, Agreed final order approving water rights settlement and dismissing administrative appeal (dated May 16, 2013)

See Section 6.0 Water Rights for details.

2.4 Vista Redonda MDWCA

The Vista Redonda MDWCA serves residences in the Vista Redonda subdivision located in Santa Fe County, New Mexico (Fig. 1). The subdivision first began to develop in the late 1960s with the first water-supply wells completed in 1968. The Vista Redonda MDWCA now serves 67 residences with seven operational water-supply wells currently connected to the water system (Fig. 2). The Infrastructure Capacity Area for Vista Redonda MDWCA includes a total of 84 residential lots that may be served (Fig. 3). Table 1 presents a summary of Vista Redonda's seven operational wells.

Table 1. Summary of Vista Redonda MDWCA water-supply wells, Santa Fe County, New Mexico

well	1a	2	3a	4	5	6	7
NMOSE File No.	RG-15616	RG-15928	RG-19043	RG-19044	RG-21573	RG-19903	RG-21573A
date drilled	3/12/1991	11/1/1968	5/11/1995	3/18/1972	7/20/1993	8/6/1993	9/17/2001
TD from well record, ft	650	597	950	424	905	905	520
TD tagged in 2011-2013, ft	-	-	945	420	798	895	535
screen interval(s) from well record, ft	523 to 564; 614 to 624	582 to 592	756 to 776; 796 to 816; 837 to 857; 877 to 897; 918 to 937 [b]	405 to 422	662 to 672; 693 to 703; 715 to 725; 745 to 755; 765 to 775; 812 to 832; 890 to 900	749 to 783; 806 to 816; 831 to 854; 877 to 900	410 to 500
casing diameter, in.	6 5/8	6 5/8	5	6 5/8	5 9/16	5 9/16	6 5/8
water level from well record, ft	307	297	452	240	480	480	276
non-pumping water level in April 2013, ft bgl	339.48	-	470.38	268.70	424.39	413.41	279.16
water column, ft [a]	311	-	480	155	481	492	241
approximate pumping water level in 2011-2013, ft bgl	430	-	504	372	459	492	298
pumping rate with valve wide open (during testing 2011-2013), gpm	25	-	20	21	18	22	25
pumping rate (connected to system, based on data collected in 2011-2013), gpm	20	6	7	11	14	17	19
approximate specific capacity, gpm/ft	0.2	-	1.2	0.1	0.4	0.2	1.0

[a] [TD from well record] – [non-pumping water level in April 2013]
[b] April 2019 well video survey
NMOSE - New Mexico Office of the State Engineer
TD - total depth
ft bgl - feet below ground level
gpm - gallons per minute
gpm/ft - gallons per minute per foot of drawdown

3.0 WATER SUPPLY

3.1 Quantity of Groundwater

Vista Redonda MDWCA's water supply is groundwater in the Tesuque Formation aquifer in the NPT Basin. The Tesuque Formation is about 900 ft thick in the Vista Redonda area. The deepest Vista Redonda wells, Wells 3a, 5, and 6, may be completed near the base of the Tesuque Formation, although lithologic logs included with well records for these wells provide no indication that the underlying Pennsylvanian-age rocks were reached at the borehole total depth.

The U.S. Geological Survey (USGS) modeled the middle to lower Tesuque Formation aquifer hydraulic conductivity as 0.7 ft/day in the Vista Redonda area (McAda and Wasiolek, 1988). This translates to aquifer transmissivity ranging from 112 to 343 ft^2/day (838 to 2,566 gpd/ft), based on saturated thickness in wells at Vista Redonda. Unconfined storage values for the types of materials composing the middle to lower Tesuque Formation range from 0.10 to 0.20. The USGS used a value of 0.15 in its model, which is consistent with laboratory results for samples from the Tesuque Pueblo Grant (Hearne, 1980).

Non-pumping water levels in Vista Redonda wells range from about 270 to 470 ft below land surface. Pumping rates at Vista Redonda range from 18 to 25 gpm based on discharge to land surface with valves wide open during development pumping. The average depth of Vista Redonda wells is 690 ft, and the average water column in the wells is about 350 ft.

Historical water-level data from 1968 to present and linear interpolation indicate declines in non-pumping water levels ranging from 0.44 to 2.15 ft/yr at Vista Redonda wells (Table 2, Appendix A). A well located about 0.75 mile southwest of Vista Redonda between the subdivision and the Village of Tesuque, which is completed in the Tesuque aquifer and monitored by the USGS (USGS ID No. 354738105553901, 18N.10E.18.13112), showed a water-level decline rate of 0.44 ft/yr between 1967 and 2015 (Appendix B).

Table 2. Summary of average drawdown rates for Vista Redonda wells and U.S. Geological Survey monitored well 18N.10E.18.13112, Santa Fe County, New Mexico

well	period of record	average drawdown rate for period of record, ft/yr
Vista Redonda Old Well 1	1968 to 2013	2.15
Vista Redonda Old Well 3	1972 to 2013	2.08
Vista Redonda Well 4	1972 to 2013	0.62
Vista Redonda Old Well 5	1972 to 2013	1.06
Vista Redonda Old Well 6	1972 to 2013	0.73
Vista Redonda Old Well 7	1973 to 2013	0.44
USGS 18N.10E.18.13112	1967 to 2015	0.44
average		1.07

Based on average water column of about 350 ft, an area of about 450 acres, unconfined storage coefficient of 0.15, and a recovery factor of 70 percent, recoverable groundwater in storage within the Tesuque Formation penetrated by the subject wells at Vista Redonda is about 16,540 acre-feet (ac-ft). Assuming a potential maximum diversion of 44 acre-feet per year (ac-ft/yr) for Vista Redonda MDWCA, groundwater in storage represents a supply exceeding 300 years. This calculation does not consider recharge, water entering the Tesuque aquifer system as subsurface inflow from the Sangre de Cristo Mountains (Wasiolek, 1995), or potential groundwater available in underlying aquifers. The quantity of mountain-front recharge estimated by developing a water budget for the Rio en Medio watershed is 1,710 ac-ft, or about 15 percent of precipitation (Wasiolek, 1995). The Vista Redonda wells are within the adjacent Rio Chupadero watershed, which is similar in size to the Rio en Medio watershed. Assuming 44 ac-ft/yr, Vista Redonda water use would be about 2.6 percent of average recharge to the Rio Chupadero watershed. Based on average saturated thickness of 350 ft and an average drawdown rate of 1.07 ft/yr, supply exceeds 300 years.

3.2 Quality of Groundwater

Table 3 presents water-quality results for Vista Redonda MDWCA wells. The groundwater supply is generally of good quality, with the exception of intermittent occurrences of total uranium concentrations and gross alpha particle activities that exceed the drinking water standards at selected wells. The groundwater supply can generally be described as sodium-bicarbonate type water.

Naturally-occurring uranium is the primary constituent of concern affecting the Vista Redonda MDWCA water supply, and gross alpha is a secondary concern for selected wells. Table 4 presents historical total uranium concentrations for Vista Redonda MDWCA wells. Although uranium is naturally-occurring in the groundwater, Table 4 demonstrates that implementation of sampling protocol in 2012 to ensure collection of representative samples resulted in lower total uranium results for selected wells. In cases where there appeared to be a relationship between total uranium results and instantaneous pumping rate and duration of pumping, operational adjustments that included reduced pumping rates were made at selected wells to optimize water quality (JSAI, 2013).

Elevated uranium concentrations in the Tesuque aquifer have been attributed to the Precambrian-age granite of the Sangre de Cristo Mountains (Johnson et al., 2008) and volcanic ash layers in the aquifer (McQuillan and Montes, 1998). In the Vista Redonda area, researchers primarily attribute the elevated uranium concentrations to the Precambrian-age granite in the adjacent mountain block. A correlation between uranium and sulfate in groundwater in the region suggests that elevated uranium concentrations are associated with oxidation of sulfide minerals (McQuillan et al., 2010). Sulfate data for Vista Redonda wells available through the New Mexico Environment Department (NMED) Drinking Water Watch website https://dww.water.net.env.nm.gov/DWW/) were insufficient to establish a correlation between uranium and sulfate at Vista Redonda. Groundwater in the Tesuque aquifer system may have elevated uranium concentrations as a result of flowing through the granitic rocks of the mountain block, or as a result of interacting with granitic material (derived from the mountain block) in the Tesuque aquifer. Uranium and total dissolved solids (TDS) concentrations appear to decrease along flow paths from the mountain front towards the Rio Grande, indicating that uranium concentrations are being diluted along the flow paths and/or mixing of different groundwater sources (Linhoff et al., 2010). Uranium concentrations in groundwater appear to decrease to the south and west in the region surrounding Vista Redonda (Johnson et al., 2008), and this trend is supported by data available through the NMED Drinking Water Watch website, showing that uranium concentrations for Tesuque MDWCA are lower than those for Vista Redonda and Chupadero MDWCAs.

Table 3. Summary of water quality results for Vista Redonda MDWCA operational wells, Santa Fe County, New Mexico

parameter	units	Vista Redonda MDWCA operational wells	sample date	total number of wells sampled	NMED/DWB standard
pH (field)	pH units	7.3 to 7.9	2011-2013	measurements collected during pumping tests at 6 wells	6.5 to 8.5[1]
specific conductance	µS/cm	460 to 611	2011-2013	measurements collected during pumping tests at 6 wells	ns
bicarbonate alkalinity	mg/L	220 to 248	2001	2	ns
hardness as CaCO3	mg/L	81 to 119	2001	2	ns
calcium	mg/L	29 to 41	2001	2	ns
magnesium	mg/L	2 to 4	2001	2	ns
sodium	mg/L	64 to 81	2017	6	ns
sulfate	mg/L	34 to 50	2001	4	250[1]
chloride	mg/L	6 to 8	2001	2	250[1]
arsenic	mg/L	0.0020 to 0.0078	2017	6	0.010
fluoride	mg/L	0.16 to 0.27	2017	6	4.0
nitrate	mg/L	<0.5 to 1.1	2018	6	10
radium-226 and 228	pCi/L	0.14 to 0.62	2018	6	5
total uranium	ug/L	14 to **48**	2018	6	30
net gross alpha	pCi/L	12 to **22**	2018	6	15
gross beta	pCi/L	4.9 to 14.7	2018	6	4 mrems/yr

[1] Secondary (aesthetic-related) standards

NMED/DWB - New Mexico Environment Department Drinking Water Bureau

values in **bold** exceed the NMED/DWB standard

ns - no standard

µS/cm - microSiemens per centimeter

mg/L - milligrams per liter

pCi/L - picocuries per liter

Table 4. Historical uranium concentrations, in micrograms per liter, for Vista Redonda MDWCA supply wells that are currently equipped and operational

date	Well 1a RG-15616	Well 2 RG-15928	Well 3a RG-19043	Well 4 RG-19044	Well 5 RG-21573	Well 6 RG-19903	Well 7 RG-21573A
4/14/93	16	8	nc	18	nc	nc	nc
9/15/93	14	10	nc	17	10	-	nc
5/17/94	14	12	nc	29	23	20	nc
8/24/94	20	14	nc	**32**	21	25	nc
12/30/99	23	29	30	**31**	19	27	nc
3/31/00	26	27	25	**32**	19	27	nc
6/1/00	25	19	**47**	**32**	20	29	nc
3/1/01	20	30	**46**	**32**	20	25	nc
10/21/02	17	22	**42**	29	27	**36**	16
12/1/03	20	23	29	**33**	30	**35**	21
3/8/05	**79**	22	**46**	**32**	23	**38**	-
5/4/05	14	21	**41**	**33**	28	20	-
8/31/05	19	15	**50**	**36**	19	**37**	-
11/7/05	28	**36**	**37**	28	30	**37**	-
2/24/06	19	19	27	**33**	**41**	25	-
9/28/06	19	21	24	**32**	23	27	18
12/18/06	19	17	25	17	**38**	27	20
2/28/07	19	17	28	**31**	-	28	26
5/1/07	30	16	**32**	**35**	-	29	25
8/28/07	**62**	18	**46**	**31**	-	**44**	**42**
12/5/07	**31**	17	**31**	**33**	-	26	28
2/18/08	**32**	18	**41**	**34**	20	28	20
5/21/08	**44**	16	**48**	**32**	21	28	21
8/29/08	17	14	18	29	17	24	23
2/6/09	20	17	23	**40**	18	30	26
6/17/09	14	12	24	**31**	15	**36**	18
8/18/09	18	15	-	**31**	19	**35**	24
11/23/09	17	15	**43**	**33**	20	26	18
3/29/10	-	19	28	**32**	20	**37**	18
5/6/10	18	-	**47**	**32**	-	27	-
5/10/10	-	-	-	-	-	-	19
8/31/10	-	-	**43**	**31**	20	27	-
12/1/10	-	-	17	29	-	18	-
3/22/11	-	-	**46**	**31**	-	**43**	-
6/9/11	-	-	**51**	**32**	-	**62**	-
7/20/11	-	-	**50**	**33**	-	**-**	-
implemented sampling protocol with 3-well-volume purge							
12/1/11	-	-	29	26	-	**-**	-
3/23/12	-	-	25	21	-	27	-
5/16/12	18	14	**44**	25	22	25	22
8/24/12	-	-	**49**	20	-	27	-
11/27/12	-	-	**46**	30	-	22	-
3/8/13	17	-	**46**	27	-	-	-
6/26/13	-	-	**50**	-	-	-	-
9/23/13	-	-	**52**	-	-	-	-
12/3/13	17	-	-	-	-	-	-
2/19/14	19	14	-	29	19	27	18
5/14/14	18	-	-	30	-	-	-
8/27/14	18	-	-	-	-	-	-
10/23/14	18	-	-	-	-	-	-
3/10/15	21	-	-	19	-	-	-
6/24/15	18	-	-	30	-	-	-
7/16/15	-	19	-	30	-	-	-
10/29/15	-	-	-	17	-	-	-
3/8/17	-	-	-	27	-	-	-
7/12/18	19	14	-	**31**	20	**48**	24
average	23	18	**38**	29	22	**31**	22
standard deviation	13	6	11	5	6	9	6
number of samples	39	33	38	49	28	38	20
number of U exceedances	5	1	24	28	2	12	1
percent U exceedances	13	3	63	57	7	32	5

- data not available U - uranium

bold - concentration exceeded NMED/DWB drinking water standard for uranium of 30 µg/L nc - well not yet completed

4.0 WATER SYSTEM

Figure 2 shows locations of Vista Redonda MDWCA operational wells, and Table 1 presents a summary of Vista Redonda's seven operational water-supply wells. Total depths of operational supply wells range from 424 to 950 ft, and approximate production capacities range from 6 to 20 gallons per minute (gpm). Specific capacities for active supply wells, based on pumping test data, range from about 0.1 to 1.2 gpm/ft of drawdown.

Vista Redonda MDWCA water system also includes two water storage tanks and about 19,000 ft of 3-in. diameter water main. The two existing storage tanks include a 29,000-gallon welded steel tank constructed when the water system was first built in 1969, and a 60,000-gallon bolted steel tank constructed in 1992. Most of the 3-in. PVC water mains were installed in 1969. An 8-in. water line from the storage tanks was added in 1992 when the second tank was constructed. These mains run under the County roads and connect to individual water meters generally located near the property line. In 2015, limited sections of the original PVC mains, installed in 1969, were removed and replaced. Inspection of the removed sections showed them to be in essentially new condition and anticipated to last for several more decades.

5.0 POTENTIAL SOURCES OF CONTAMINATION

The primary contaminant source that has the potential to contaminate Vista Redonda MDWCA's groundwater supply is septic systems associated with residential lots in and adjacent to the community (see Fig. 3). Former Vista Redonda supply well "Old Well 7" was decommissioned due to elevated nitrate concentrations likely related to contamination from a nearby septic system (see Fig. 2; JSAI, 2013), and was subsequently plugged and abandoned. Vista Redonda Well 6 is not currently in use due to suspected contamination from near-surface water, possibly originating from a septic system.

A review of potential sources of contamination using NMED EGIS Mapper tool found only two sites in the vicinity and generally up-gradient of Vista Redonda (see Appendix C):

- An inactive underground storage tank facility site on file with NMED Petroleum Storage Tank Bureau: Facility #30333, Jean Marcel Rouff, Lot 2, Unit A, Vista Redonda. No other information was available for this site.
- A groundwater discharge permit on file with NMED Ground Water Quality Bureau: DP-774, Sangre de Cristo Center, 410 State Rd 592, permitted for domestic discharge of 3,000 gallons per day

6.0 WATER RIGHTS

A summary of Vista Redonda MDWCA's water rights is presented in Table 5. Vista Redonda owns a total of 44.08 ac-ft/yr of water rights and permits for MDWCA use within the Infrastructure Capacity Area. The water rights documents referenced in the discussion below are provided in Appendix D.

6.1 1987 Supplemental Order

State of New Mexico ex re. State Engineer v. Aamodt, No. CIV-6639 M, Sub-file No. DS-219, Vista Redonda MDWCA, Supplemental Order, states that Vista Redonda has the right to withdraw a total of 29.08 ac-ft/yr of groundwater from the Nambe-Pojoaque River Stream System for domestic use. The Supplemental Order, dated January 8, 1987, describes seven NMOSE file nos. with rights to divert 3 ac-ft/yr each, plus an additional 8.08 ac-ft/yr under RG-15616 & RG-15928 (Alto Ditch right).

6.2 RG-19902 into RG-21573A

An NMOSE permit approved in 2001 allowed for change of point of diversion of 3 ac-ft/yr from RG-19902 (see 1987 Supplemental Order) to RG-21573A. It should be noted that RG-19902 had been transferred into existing well RG-21573 prior to being transferred into RG-21573A.

6.3 RG-15616 & RG-15928 et al.

An NMOSE permit approved in 2010 allowed for two additional points of diversion under the Alto Ditch right (RG-15616 & RG-15928, see 1987 Supplemental Order): NMOSE Well Nos. RG-19903 and RG-21573A.

6.4 2014 Permits

NMOSE permits approved in 2014 as a result of *Vista Redonda Water & Property Owners Association, Inc. v. New Mexico State Engineer*, D-101-CV-2006-02160, Agreed final order approving water rights settlement and dismissing administrative appeal (dated May 16, 2013), amounted to a total diversion of 15 ac-ft/yr:

- 6 ac-ft/yr under NMOSE File Nos. RG-94436 and RG-94437 (3 ac-ft/yr each; not yet drilled)
- An additional 3 ac-ft/yr that may be diverted from RG-19903 under NMOSE File No. RG-95071
- An additional 6 ac-ft/yr that may be diverted from RG-21573A under NMOSE File Nos. RG-95072 and RG-95073

Table 5. Summary of Vista Redonda MDWCA water rights and permits

Vista Redonda well name	NMOSE file no.	1			2			3		
		water right	diversion, ac-ft/yr	reference	water right	diversion, ac-ft/yr	reference	water right	diversion, ac-ft/yr	reference
Well 1a	RG-15616	RG-15616	3	1987 Supplemental Order	RG-15616 & RG-15928 et al.	8.08	1987 Suppl. Order, 2010 permit			
Well 2	RG-15928	RG-15928	3	1987 Supplemental Order						
Well 6	RG-19903	RG-19903	3	1987 Supplemental Order				RG-95071	3	2014 permit
Well 7	RG-21573A	RG-19902 into RG-21573A	3	1987 Suppl. Order, 2001 permit				RG-95072 & RG-95073	6	2014 permit
Well 3a	RG-19043	RG-19043	3	1987 Supplemental Order						
Well 4	RG-19044	RG-19044	3	1987 Supplemental Order						
Well 5	RG-21573	RG-21573	3	1987 Supplemental Order						
(Lot 111) [a]	RG-94436	RG-94436	3	2014 permit						
(Tank site) [a]	RG-94437	RG-94437	3	2014 permit						
subtotals			***27***			***8.08***			***9***	
total		**44.08**								

[a] not yet drilled
NMOSE - New Mexico Office of the State Engineer
ac-ft/yr - acre-feet per year

Among the conditions of approval for the 2014 permits:

- Filing of the water development plan was a permit condition under RG-95071, RG-95072, and RG-95073.
- Proof of Beneficial Use is to be filed prior to December 16, 2054 under RG-95071, RG-95072, and RG-95073.
- Wells RG-94436 and RG-94437 are to be completed and well records filed on or before January 1, 2031.

6.5 2013 Proof of Beneficial Use

Vista Redonda MDWCA filed Proof of Beneficial Use for RG-15616, RG-15928, RG-19903, and RG-21573 in 2013, demonstrating a total diversion of 20.21 ac-ft/yr from these wells in 2012, which includes the right to divert 3 ac-ft/yr from each well plus the additional 8.08 ac-ft/yr under the Alto Ditch right (RG-15616 & RG-15928 et al.). Note that although the total diversion of 20.21 ac-ft/yr is 0.6 percent over the permitted amount of 20.08 ac-ft/yr, it is within the meter accuracy.

7.0 WATER DEMAND

7.1 Population

7.1.1 Current Population

The Vista Redonda MDWCA currently serves 67 residences. Assuming an average household size of 2.27 (zip code 87506, 2010 U.S. Census Bureau), this represents a population of about 152 currently served by the water system.

7.1.2 Population Growth Projections

The Infrastructure Capacity Area for Vista Redonda MDWCA includes a total of 84 residential lots that may be served. As the subdivision has achieved approximately 80 percent of full build-out over the last 50 years, it is reasonable to expect full build-out to occur within the next 40 years. Assuming an average household size of 2.27, this represents a future population of about 191 to be served by the water system by the end of the 40-year period. This represents an annual growth rate of 0.5 to 0.6 percent, which is in-line with the projected average annual growth rate of 0.7 percent presented by University of New Mexico Geospatial and Population Studies (2014) for Santa Fe County between 2010 and 2030. This annual growth rate is also in-line with low-growth projections for Santa Fe County through 2060 presented in the Jemez y Sangre Regional Water Plan (NMISC, 2016). Population projections for Vista Redonda MDWCA for the 40-year planning period are presented in Table 6.

Table 6. Population projections and annual growth rates for Vista Redonda MDWCA, Santa Fe County, New Mexico

time period	average annual percent growth	Vista Redonda MDWCA population at end of time period
2019	-	152
2019-2029	0.6	162
2029-2039	0.6	171
2039-2049	0.6	181
2049-2059	0.5	191

7.2 Water Use

Table 7 presents total gallons per capita per day (GPCD) water use for Vista Redonda MDWCA based on diversion records submitted to NMOSE between 2014 and 2018 and population estimates (see Section 7.1.1 above). The current estimated total GPCD for Vista Redonda is 148 GPCD (average for 2014 to 2018). The NMOSE GPCD Calculator Spreadsheet is provided as Appendix E.

Table 7. Historical water diversions for Vista Redonda MDWCA, Santa Fe County, New Mexico

year	total metered diversions, ac-ft	April to September precipitation, in. [c]	population served	total GPCD [b]
2014	22.1	8.72	150	131
2015	23.2	8.83	150	138
2016	25.5	**6.37**	151	151
2017	26.0	**8.16**	152	152
2018	28.6	**8.13**	152	168
average	25.1	8.56 [d]	151	148

[b] [metered diversions] / population served
[c] Santa Fe 2 COOP climate station 298085
[d] average for period of record 1972 to 2018

bold – below-average summer precipitation
ac-ft - acre-feet
GPCD - gallons per capita per day

Total GPCD presented in the Jemez y Sangre Regional Water Plan for selected drinking water-supply systems generally ranged from 50 to 156 GPCD (NMISC, 2016); however, the dataset focused on the East Mountains area (east of the Sandia Mountains) and many of the low GPCD values below 100 GPCD are supply-driven as opposed to demand-driven, as there is not an adequately developed water supply for many of these systems to provide the public with an acceptable level of typical water use needs. Many of these water systems may also be under-funded and struggling with aging infrastructure. Per capita demand for public water systems in the "Aamodt Subregion" averaged 96 GPCD in 2010 (Lewis et al., 2013), an increase over the rate in 2000 of 89 GPCD. This increase in per capita usage over time may also be a sign that GPCD values are supply-driven as opposed to demand-driven.

Los Alamos County currently has 200 to 300 GPCD, and City of Santa Fe service area currently has less than 100 GPCD, but it is difficult to compare MDWCA water use to larger public utilities in more urbanized areas for a variety of reasons, including the following:

- Different types of water usage (single-family residential use for MDWCAs versus a variety of uses for larger public utilities in urban areas)
- Inclusion of water use by multi-family residential and group quarters for larger public utilities in urban areas
- More advanced water metering for larger public utilities (i.e., SCADA)

Total annual diversions and GPCD vary somewhat based on the extent to which landscaping must be irrigated during the growing season, which is in turn based on summer precipitation or the lack thereof. Table 7 shows that total annual diversions were significantly higher for the years with below-average summer precipitation. In addition, the population served likely increases somewhat during the summer season, as part-time residents are common in the region and tend to prefer the summer season. Table 8 presents a summary of quarterly water diversions as percentages of total annual diversions, demonstrating that about 75 percent of total annual diversions occurs in the 2nd and 3rd quarters, April through September.

7.3 Water Demand Projections

Water demand projections for years 2019 to 2059 presented in Table 9, in terms of total diversions, are based on projection of full build-out of 84 residential lots by 2059 and a diversion of 0.525 ac-ft/yr per residence. The diversion of 0.525 ac-ft/yr per residence is based on existing Vista Redonda MDWCA water rights and permits. For comparison, this represents about half of

the amount permitted from a 72-12-1.1 domestic well to serve one household (1 ac-ft/yr; 19.27.5.9.D (1) NMAC). Diversion of the total water rights to serve 84 lots at full build-out would equate to total GPCD of about 206 GPCD.

Table 8. Quarterly water diversions as percentages of total annual diversions, Vista Redonda MDWCA, Santa Fe County, New Mexico

year	2014	2015	2016	2017	2018	average
quarter	percentage of total annual diversions					
1Q (January to March)	10	14	12	9	9	11
2Q (April to June)	34	35	33	35	37	34
3Q (July to September)	39	38	38	41	42	39
4Q (October to December)	17	13	18	16	12	15

Table 9. Water demand projections for Vista Redonda MDWCA, Santa Fe County, New Mexico

time period	projected Vista Redonda MDWCA residences	projected water demand, ac-ft/yr
2019	65	34.1
2029	70	36.6
2039	74	39.1
2049	79	41.6
2059	84	44.1

ac-ft/yr - acre-feet per year

7.4 Non-Revenue Water

Non-revenue water is defined by the AWWA water balance (Table 10). Between 2014 and 2018, Vista Redonda MDWCA's non-revenue water represented about 6 percent of total diverted water (Table 11).

AWWA has set an industry standard goal of less than 10 percent for water losses (AWWA, 1996), and Vista Redonda water losses appear to be well below this standard as non-revenue water includes water losses in addition to unbilled authorized use such as well and line flushing.

Table 10. American Water Works Association water balance

total water diverted	authorized deliveries	billed authorized [a]	billed metered	revenue
			billed unmetered	
		unbilled authorized [b]	unbilled metered	non-revenue
			unbilled unmetered	
	water losses	apparent losses [c]	unauthorized	
			customer metering inaccuracies	
			systematic data handling errors	
		real losses [d]	leakage on transmission and/or distribution lines	
			leakage and overflows at Utility storage tanks	
			leakage on service connections	

[a] examples include metered deliveries for residential, industrial, commercial, and institutional use, and park and golf course irrigation
[b] examples include metered main flushing, sewer cleaning, potable well flushing, non-potable production
[c] examples include theft and vandalism, customer metering inaccuracies, and data handling errors
[d] examples include line leakage, and storage tank leakage and overflow

Table 11. Vista Redonda MDWCA non-revenue water and total water losses

year	total diversions, ac-ft/yr	revenue water, [a] ac-ft/yr	non-revenue water, ac-ft/yr	percentage of diversion that represents non-revenue water
2014	22.1	21.5	0.6	3
2015	23.2	20.8	2.3	10
2016	25.5	23.7	1.9	7
2017	26.0	24.1	1.9	7
2018	28.6	27.6	1.0	3
average	25.1	23.5	1.5	6

ac-ft/yr - acre-feet per year

8.0 WATER CONSERVATION

8.1 Baseline Water Conservation

8.1.1 Metering and Billing

Water metering at Vista Redonda MDWCA includes metering of diversions from individual wells, and metering of deliveries to customers. Although customers are billed on an annual basis, each customer receives a monthly water statement to monitor consumption and any potential leakage.

8.1.2 Water Rates

Vista Redonda MDWCA's water rate structure imposes additional costs on customers that use over 0.5 ac-ft/yr (Table 12). The billing system is based on a fixed annual water allotment of 163,500 gallons (0.5 ac-ft/yr) for each customer. If a customer exceeds this allotment, a progressive excess user fee structure is applied for the remainder of that year to encourage conservation.

Table 12. Current water rate structure for annual water billing, Vista Redonda MDWCA, Santa Fe County, New Mexico

type of lot	annual capital reserve assessment [a]	annual fixed operating assessment [a]	excess user fees	
			volume of water, thousands of gallons	fee, per thousand gallons
developed	$1,000	$1,000 [b]	> 163.5 to 200	$8.43
			> 200 to 250	$13.02
			> 250 to 300	$17.62
			> 300	$25.00
undeveloped	$1,000	$500	na	na

[a] plus 5 percent tax
[b] up to allotment of 163,500 gallons; this equates to $6.12 per thousand gallons; excess user fees apply over 163,500 gallons

8.1.3 Infrastructure Improvements

In 2015, limited sections of the original PVC water mains, installed in 1969, were removed and replaced. Inspection of the removed sections showed them to be in essentially new condition and anticipated to last for several more decades. The interior of one of Vista Redonda MDWCA's water tanks was recently recoated and repaired to fix some minor leaks on the tank bottom.

8.1.4 Analysis of Consumption Data

Vista Redonda MDWCA conducts monthly analysis of consumption to identify high water users in order to assess excess user fees as described in Section 8.1.2.

8.2 Water Conservation Plan

8.2.1 Consideration of Metering Unbilled Water

In the case of significant increases in non-revenue water, Vista Redonda MDWCA may consider metering of unbilled authorized water use such as well and line flushing within the 40-year period; however, non-revenue water and water losses are currently extremely low.

8.2.2 Evaluation of Water Rate Structure

Vista Redonda MDWCA may consider re-evaluation and adjustment of their water rate structure within the 40-year period, in the case of significant increases in consumption; however, consumption is currently relatively low.

8.2.3 Analysis of Consumption Data

As described in Section 8.1.4, Vista Redonda MDWCA already conducts monthly analysis of consumption to identify high water users in order to assess excess user fees. These data may be used in the future to adjust both the fixed annual allotment at which excess rates are assessed as well as increase the excess rate structure if circumstances indicate that further conservation efforts are warranted.

8.2.4 Infrastructure Improvements

Vista Redonda MDWCA plans to continue infrastructure improvements in order to continue to maintain low water losses. As indicated in Section 8.1.3, the interior of one of Vista Redonda MDWCA's water tanks was recently recoated and repaired to fix some minor leaks on the tank bottom. While there is no indication of leakage from their second tank, Vista Redonda MDWCA plans to recoat the second tank in late 2019 as a preventative measure.

9.0 WATER DEVELOPMENT PLAN

9.1 Implementation of Water Conservation Plan

Vista Redonda MDWCA will continue to implement baseline water conservation measures as described in Section 8.1, and will implement the components of the Water Conservation Plan described in Section 8.2, as needed.

9.2 Replacement Wells and New Wells

Vista Redonda MDWCA has sufficient water rights and permits to supply water to the community over the 40-year period. Development of water supply to meet current and future demand is generally based on potential regulatory/administrative constraints, as opposed to physical capacity of all wells, or deficiency in the amount of existing water rights and permits. Meeting current and future demand will require flexibility to produce water from a number of wells, including existing wells, future replacement wells, and permitted locations for new wells within the Infrastructure Capacity Area, due to the following limitations:

- Limited production rates and specific capacities at individual wells
- Intermittent occurrences of elevated total uranium concentrations and gross alpha particle activities at selected wells
- Reduced pumping to lower uranium and gross alpha particle production at selected wells
- Contamination of several well sites due to apparent infiltration and migration of near-surface water to groundwater, including potential contamination from septic systems

Regulatory/administrative constraints relate to issues that may arise as it becomes necessary for Vista Redonda to complete replacement wells and re-assign water right permits among existing and future well locations within the Infrastructure Capacity Area due to the limitations described above.

Potential replacement wells or new wells to be completed in order to meet future water demand are discussed below.

9.2.1 Replacement Well 4

The site of Well 4 (RG-19044) has been evaluated for a replacement well (JSAI, 2016). Based on analysis of available information, it is likely that a replacement well could be completed at the Well 4 site, with a longer screen interval and to greater depth, and with higher production and better water quality than existing Well 4. A replacement well at the site would be permitted with the NMOSE as a replacement well within 100 ft from the original well.

RG-19044 is currently permitted for a diversion of 3 ac-ft/yr, but it is likely that a replacement well at the site could produce more than 3 ac-ft/yr. Vista Redonda may opt to re-assign permit RG-95071 for 3 ac-ft/yr previously assigned to Vista Redonda Well 6 (RG-19903), to Replacement Well 4. Well 6 was recently taken out of service due to potential contamination due to possible infiltration and migration of near-surface water to groundwater.

9.2.2 Evaluation of Additional Sites for Replacement Wells

In addition to Well 4, Vista Redonda may evaluate existing Wells 1a, 2, 3a, and 5 for replacement. Well 1a was completed in 1991 with 51 ft of screen interval, and Well 2 was completed in 1968 with only 10 ft of screen interval (see Table 1). These wells have generally been in compliance with respect to drinking water standards, and replacement wells completed with longer screen intervals, and possibly to greater depth (in the case of Well 2) may result in higher production while continuing to meet drinking water standards.

A replacement well completed higher in the formation at Well 3a and with careful attention to well construction may have potential to meet drinking water standards, although production rate at a shallower replacement well may be lower than the existing well.

Existing Well 5 was found to have relatively low well efficiency based on 2011 pumping test data (JSAI, 2013), and a replacement well completed with careful attention to well construction may result in higher production while continuing to meet drinking water standards.

9.2.3 Permits for New Wells

Vista Redonda MDWCA has permits for two wells that have not yet been drilled (Tank site, and Lot 111), for 3 ac-ft/yr each.

9.3 Uranium Treatment System for Well 3a

Vista Redonda MDWCA is considering installation of a uranium treatment system at Well 3a to bring the water quality at this well into compliance with regard to uranium. This will likely be implemented during the 40-year period.

9.4 Evaluation of Deeper Target Aquifers

Vista Redonda MDWCA may evaluate deeper potential target aquifers below the Tesuque Formation within the Infrastructure Capacity Area, such as Pennsylvanian-age limestones, conglomerates, and sandstones, in terms of potential to produce greater quantities of high-quality water from individual wells completed in deeper target aquifers.

9.5 Groundwater Level Monitoring Program

It is recommended that Vista Redonda MDWCA implement a groundwater level monitoring program in order to monitor non-pumping and pumping water levels at active and inactive wells, identify any short-term and/or long-term water-level trends, and update estimates of remaining saturated thickness in the vicinity of Vista Redonda supply wells. The groundwater level monitoring program would build on historical water-level data collected at Vista Redonda (see Appendix A).

Groundwater level monitoring data would be used to make water-supply management decisions to meet water demands over the 40-year planning period. The groundwater level monitoring program should include active supply wells and nearby inactive wells owned by Vista Redonda MDWCA. When collecting water-level measurements, the measuring point should be noted, and it should be noted whether the well was pumping at the time of the measurement, and the corresponding instantaneous pumping rate. Measurements should be taken on a semi-annual basis at a minimum.

10.0 REFERENCES

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ILLUSTRATIONS

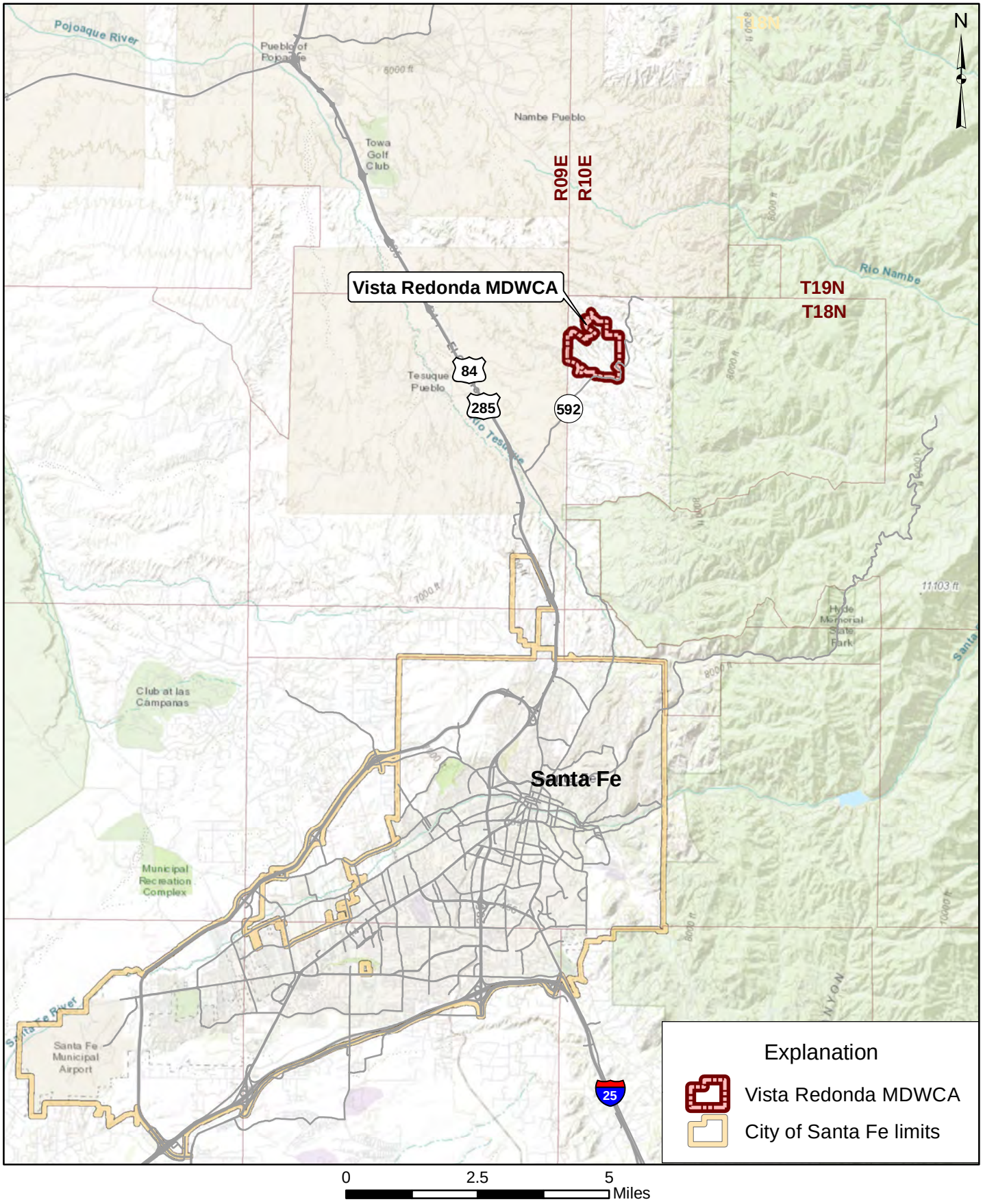


Figure 1. Location map showing Vista Redonda MDWCA, Santa Fe County, New Mexico.

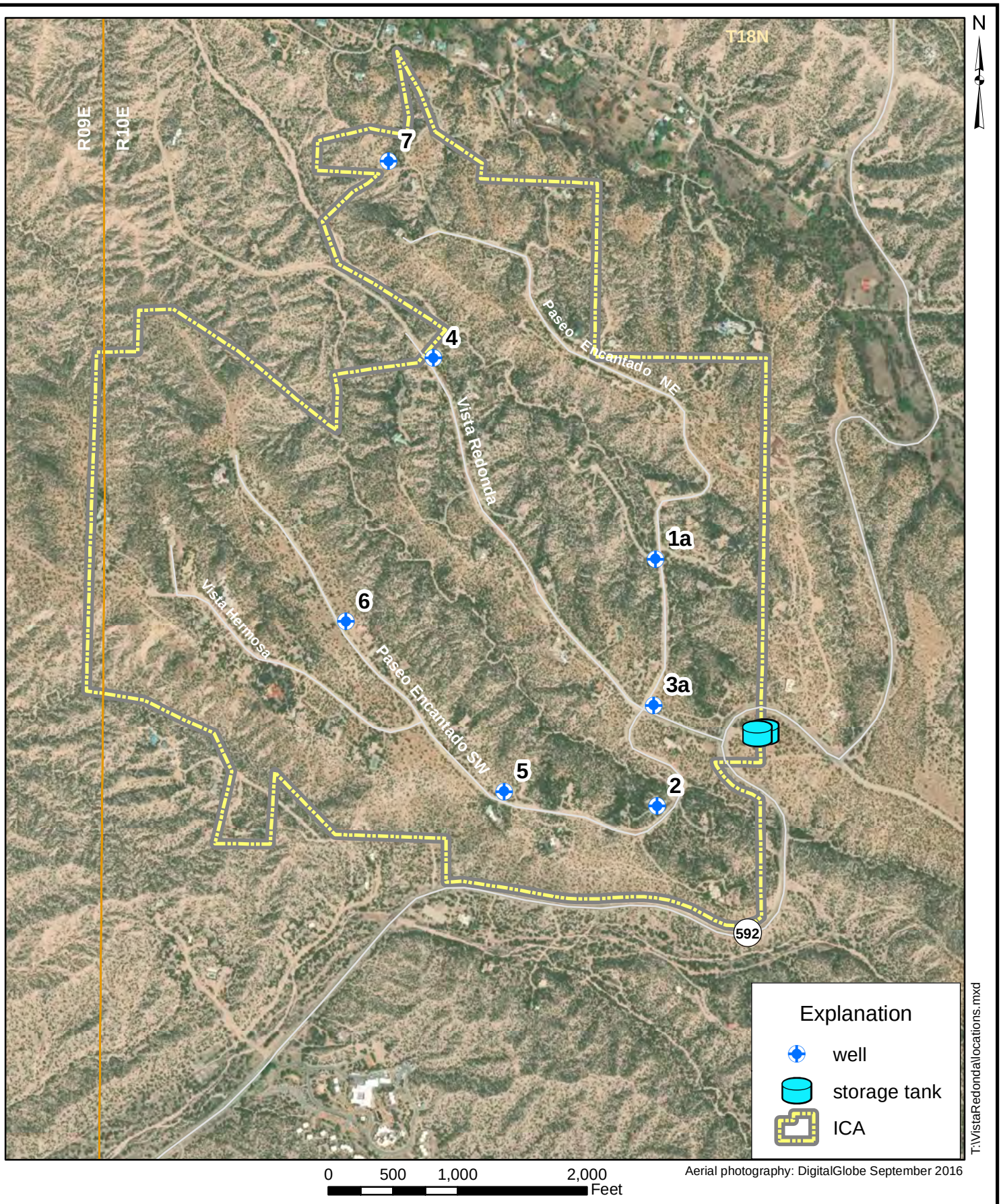
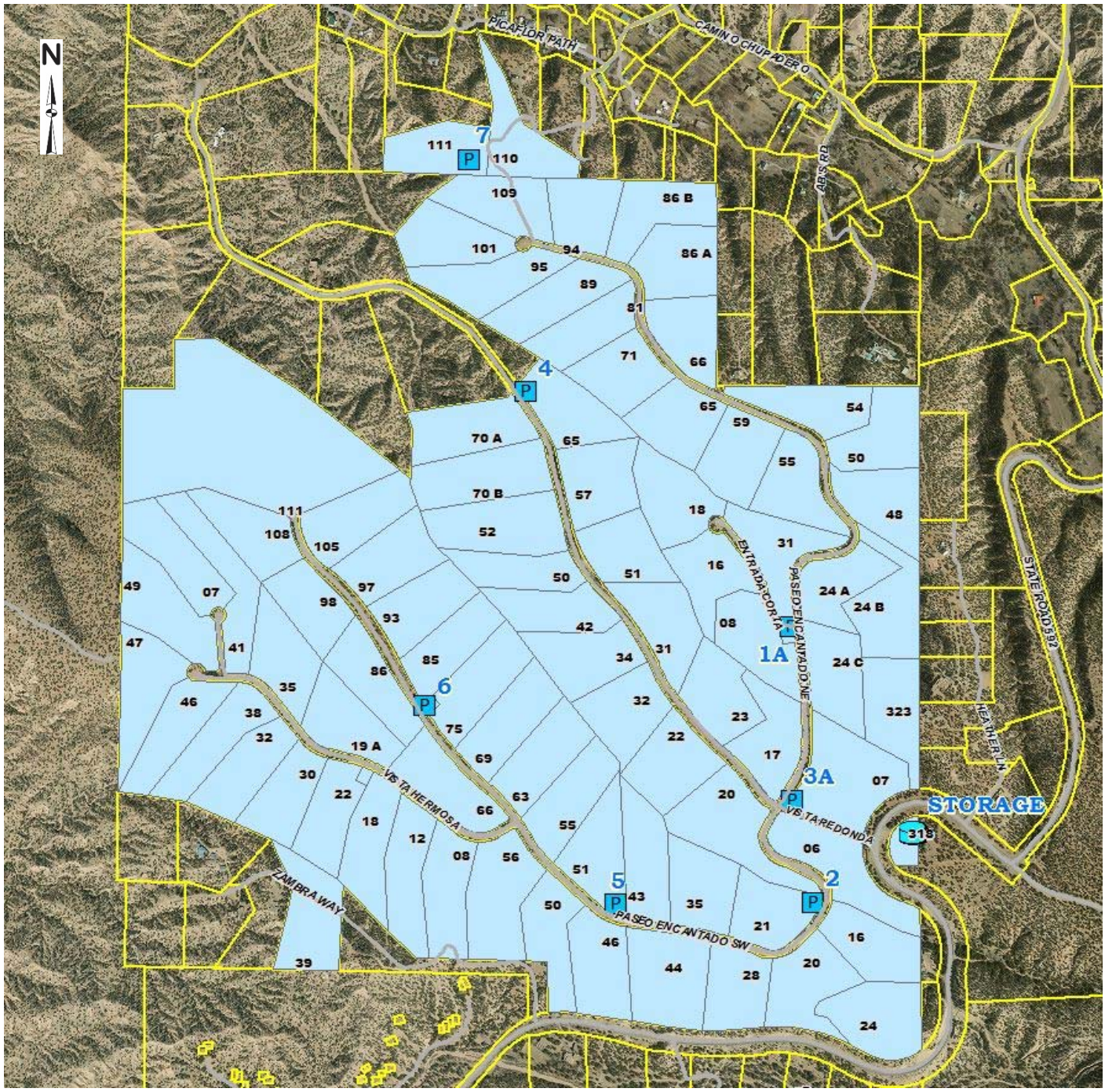


Figure 2. Aerial photograph showing Vista Redonda MDWCA Infrastructure Capacity Area (ICA), operational wells, and storage tanks, Santa Fe County, New Mexico.



Source: Santa Fe County GIS Dept., Sanderson Land & Water Consulting, LLC (scale not available)

Figure 3. Infrastructure Capacity Area map for Vista Redonda MDWCA, Santa Fe County, New Mexico.

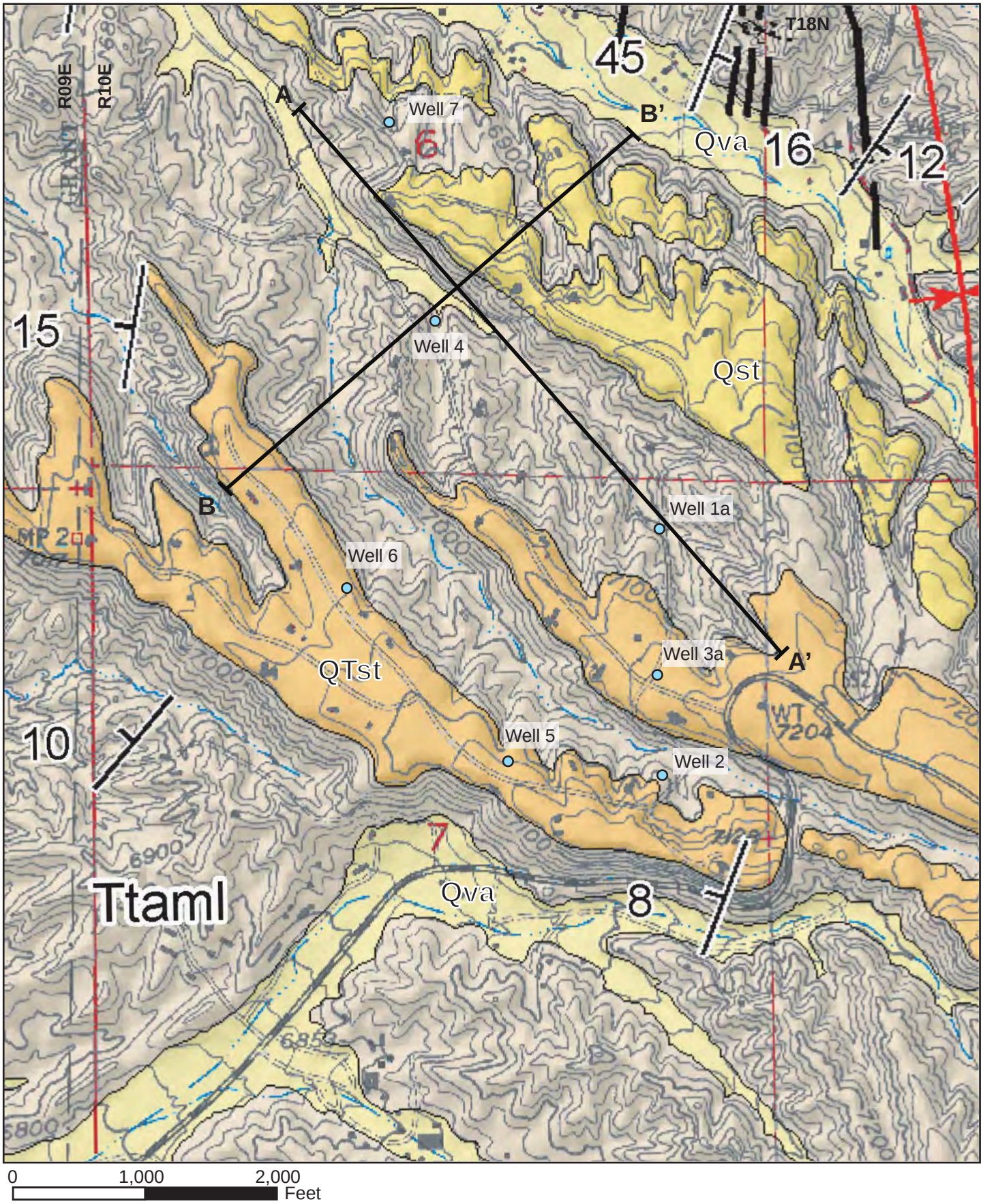


Figure 4. Geologic map showing the Vista Redonda MDWCA area, Santa Fe County, New Mexico (Read and Koning, 2004, revised 2005).

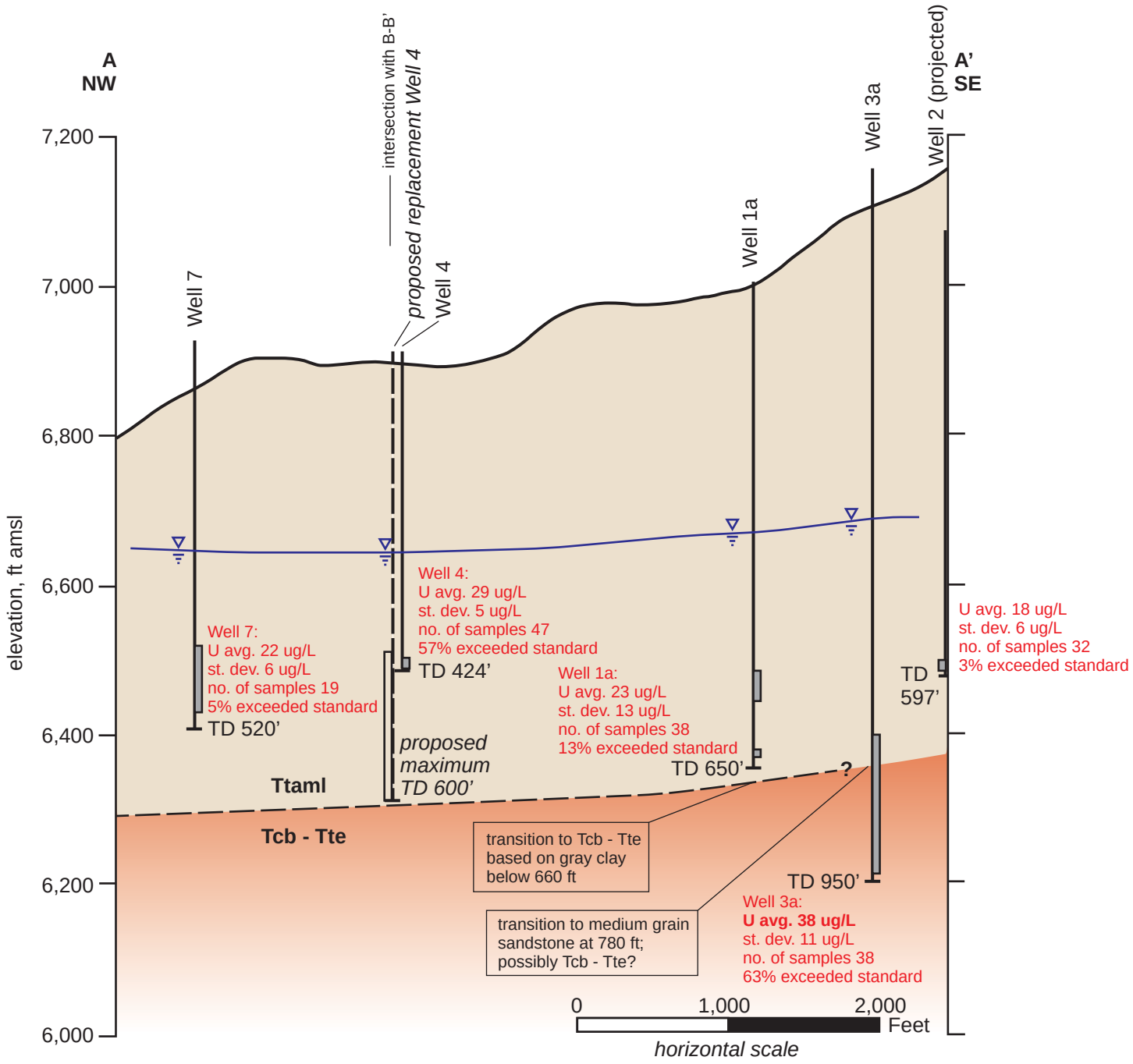


Figure 5. Northwest-southeast hydrogeologic cross-section A-A' through the Vista Redonda MDWCA area, Santa Fe County, New Mexico.

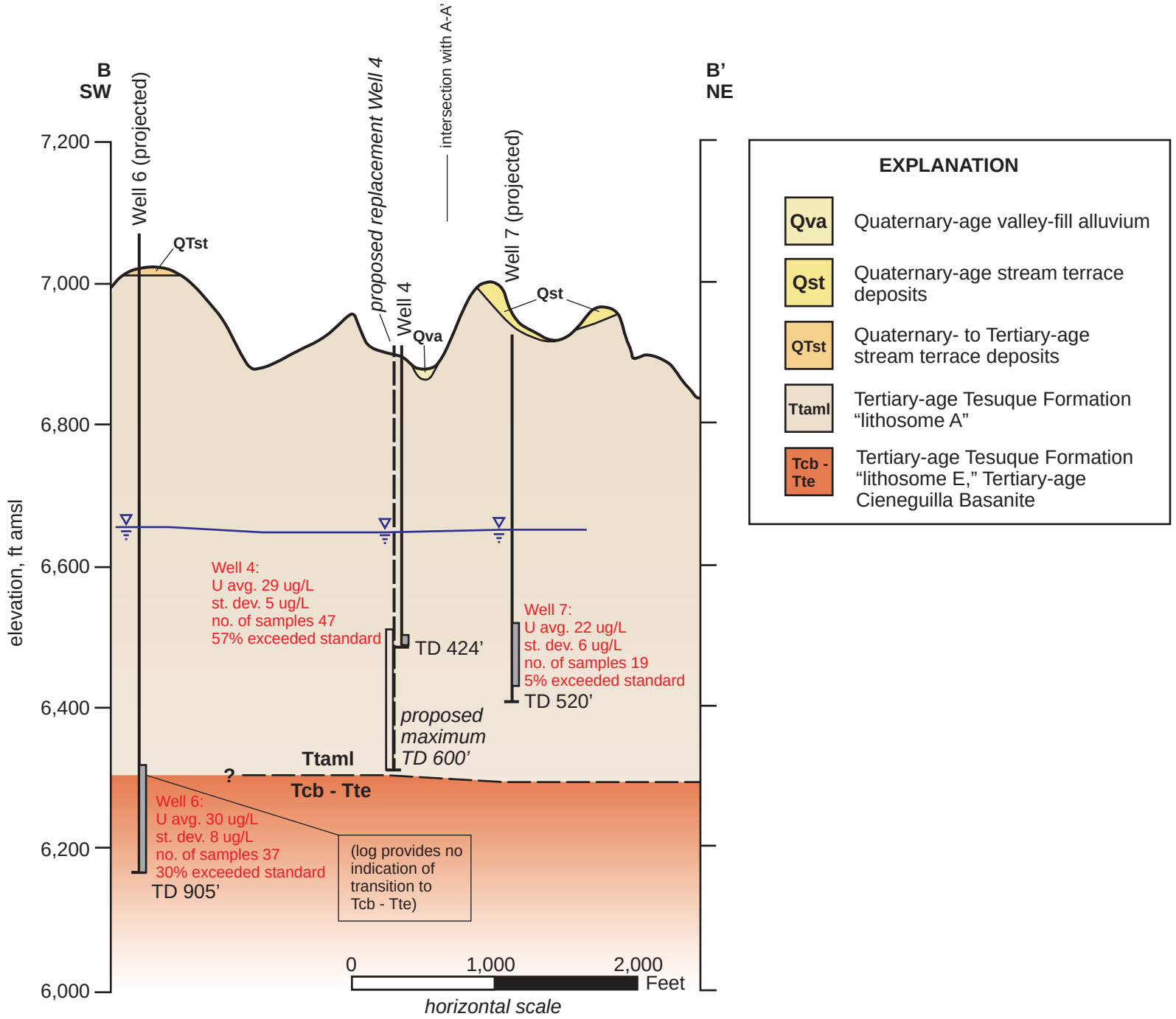


Figure 6. Southwest-northeast hydrogeologic cross-section B-B' through the Vista Redonda MDWCA area, Santa Fe County, New Mexico.

APPENDICES

Appendix A.

Aerial photograph showing wells for which water levels have been monitored at Vista Redonda, and hydrographs for monitored wells, Vista Redonda MDWCA, Santa Fe County, New Mexico

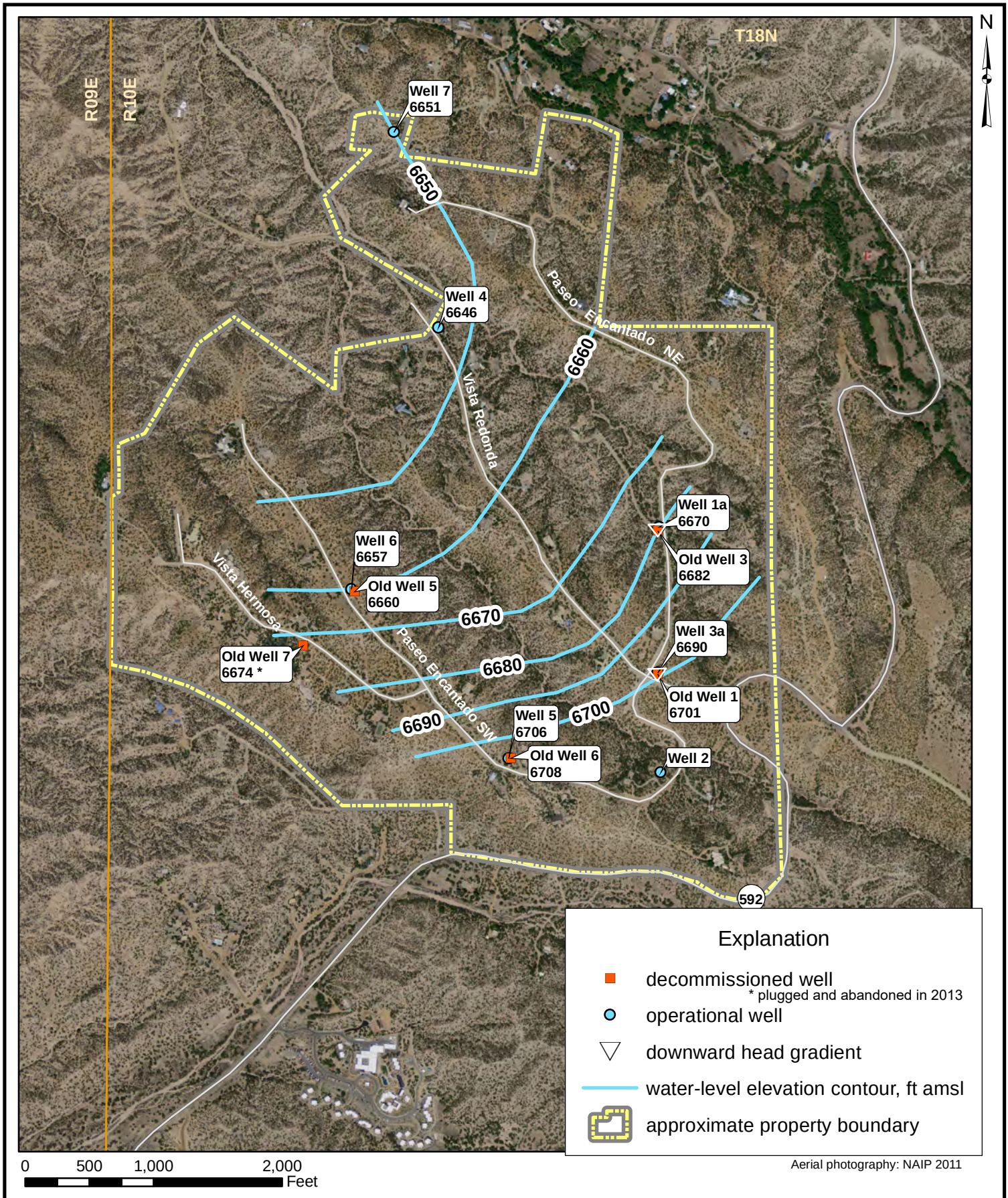


Figure A1. Aerial photograph showing wells for which water levels have been monitored at Vista Redonda MDWCA, Santa Fe County, New Mexico.

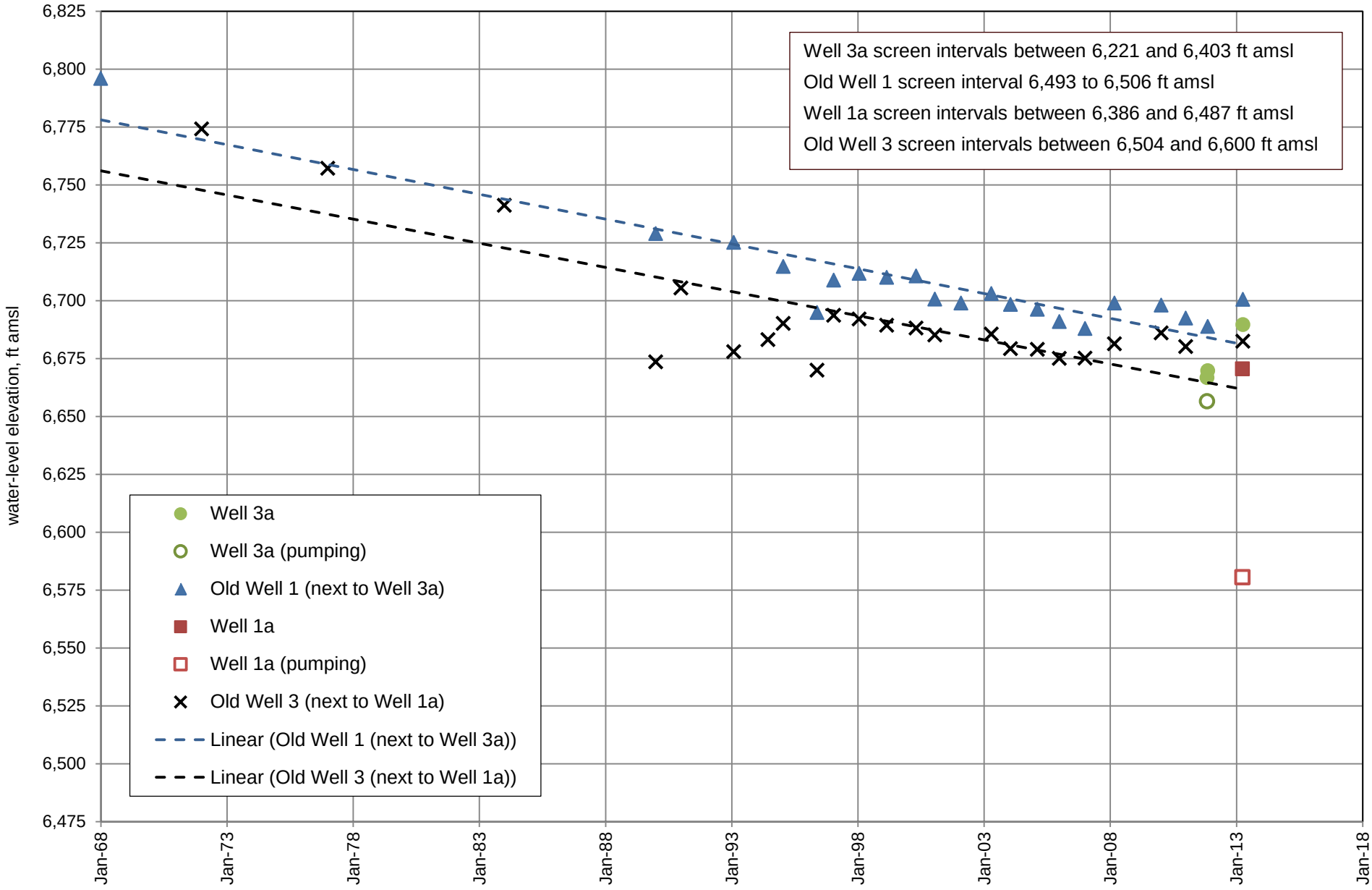


Figure A2. Graph showing historical water levels in Old Wells 1 and 3, and operational Wells 1a and 3a, Vista Redonda MDWCA, Santa Fe County, New Mexico.

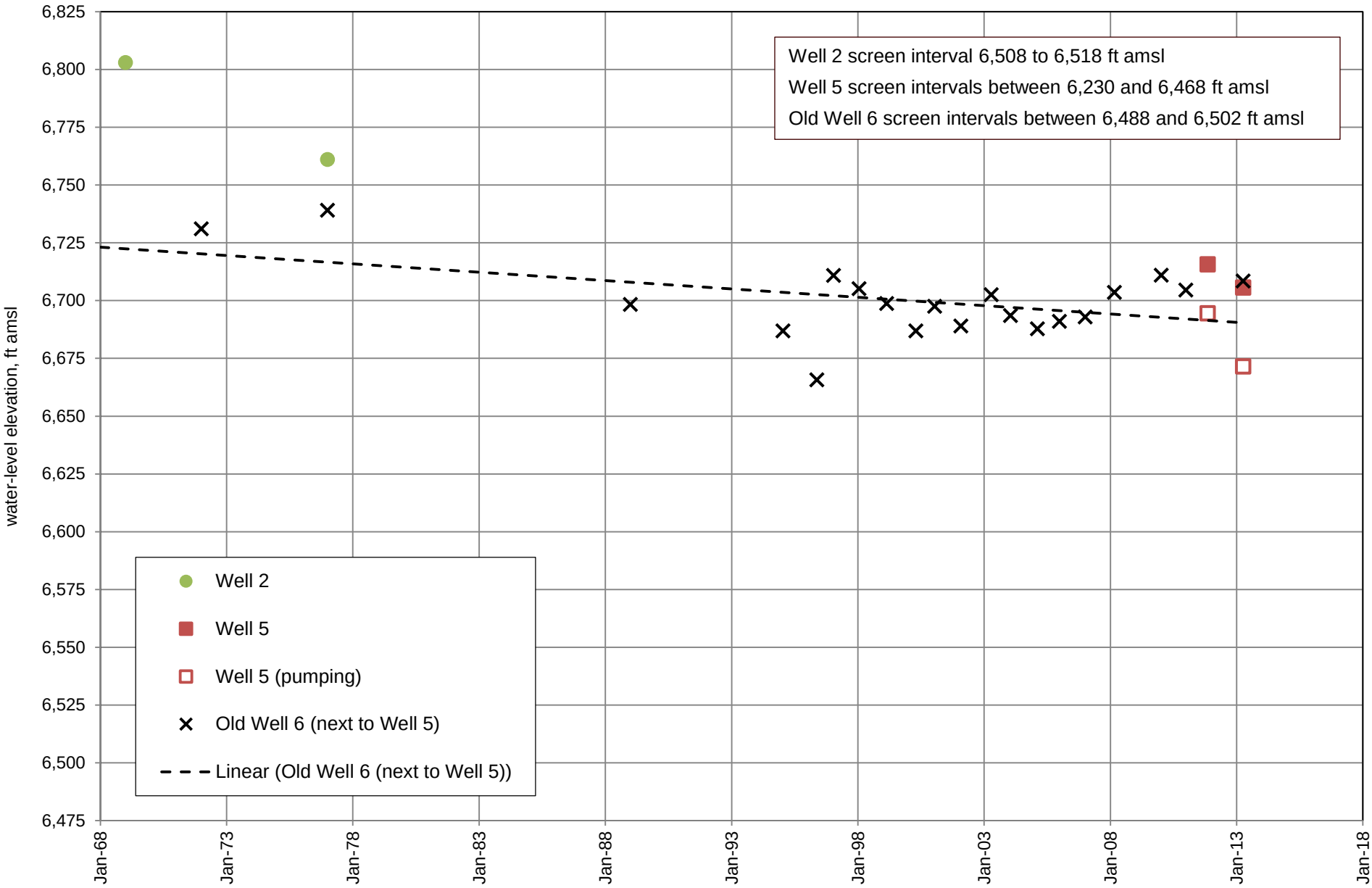


Figure A3. Graph showing historical water levels in Old Well 6 and operational Wells 2 and 5, Vista Redonda MDWCA, Santa Fe County, New Mexico.

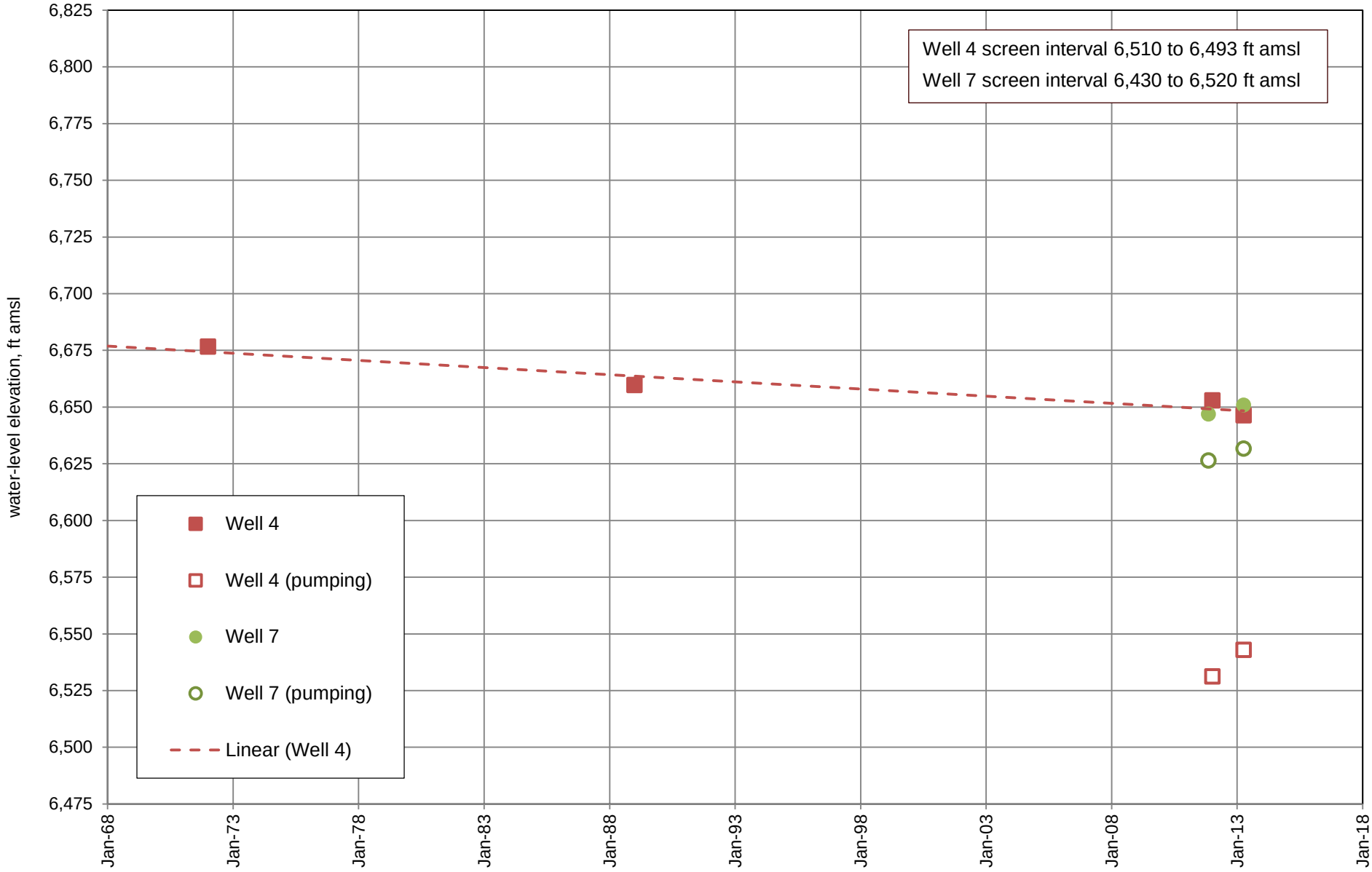


Figure A4. Graph showing historical water levels in operational Wells 4 and 7, Vista Redonda MDWCA, Santa Fe County, New Mexico.

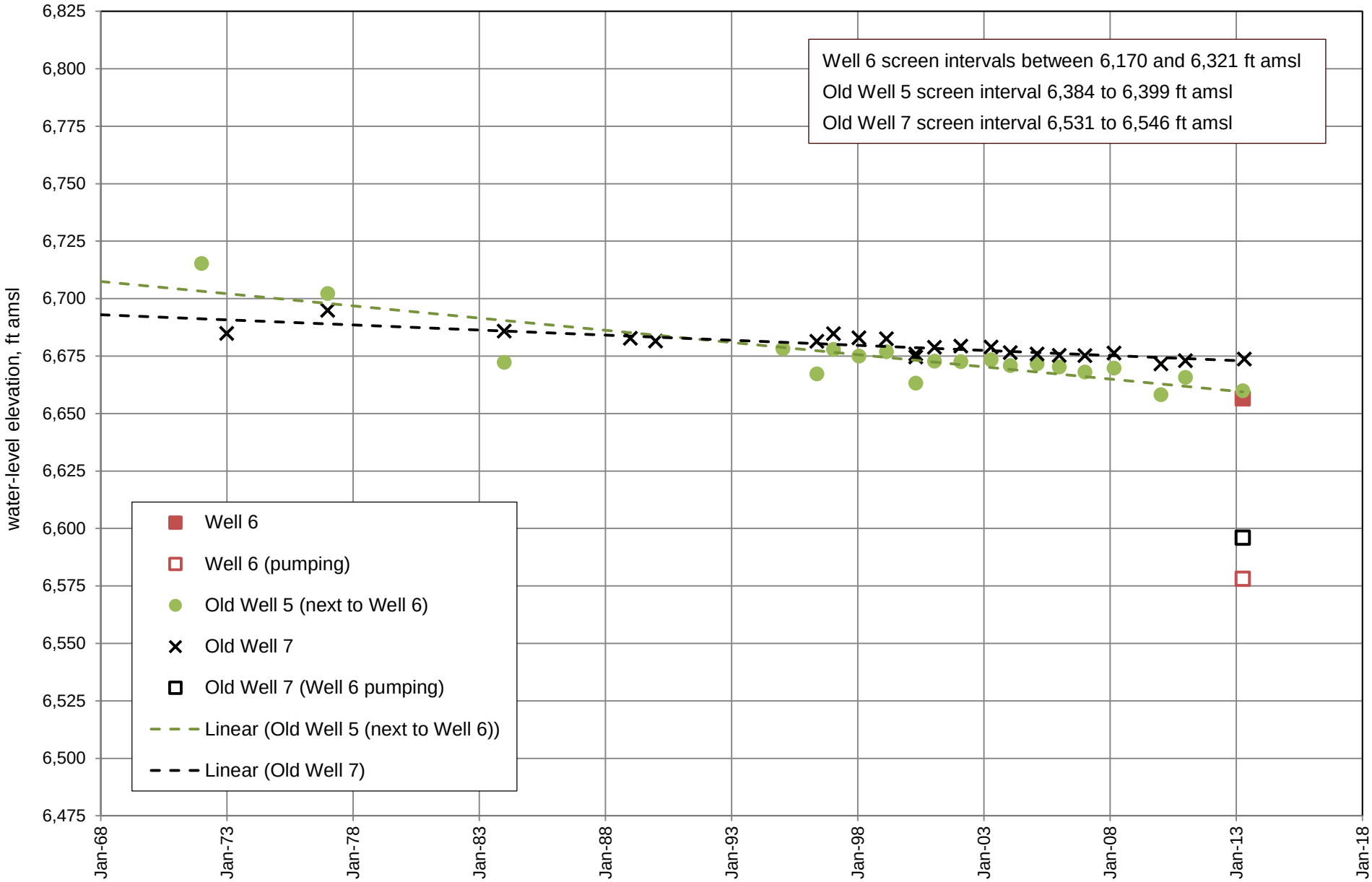


Figure A5. Graph showing historical water levels in Old Wells 5 and 7 and operational Well 6, Vista Redonda MDWCA, Santa Fe County, New Mexico.

Appendix B.

Hydrograph for well monitored by U.S. Geological Survey near Vista Redonda MDWCA, Santa Fe County, New Mexico

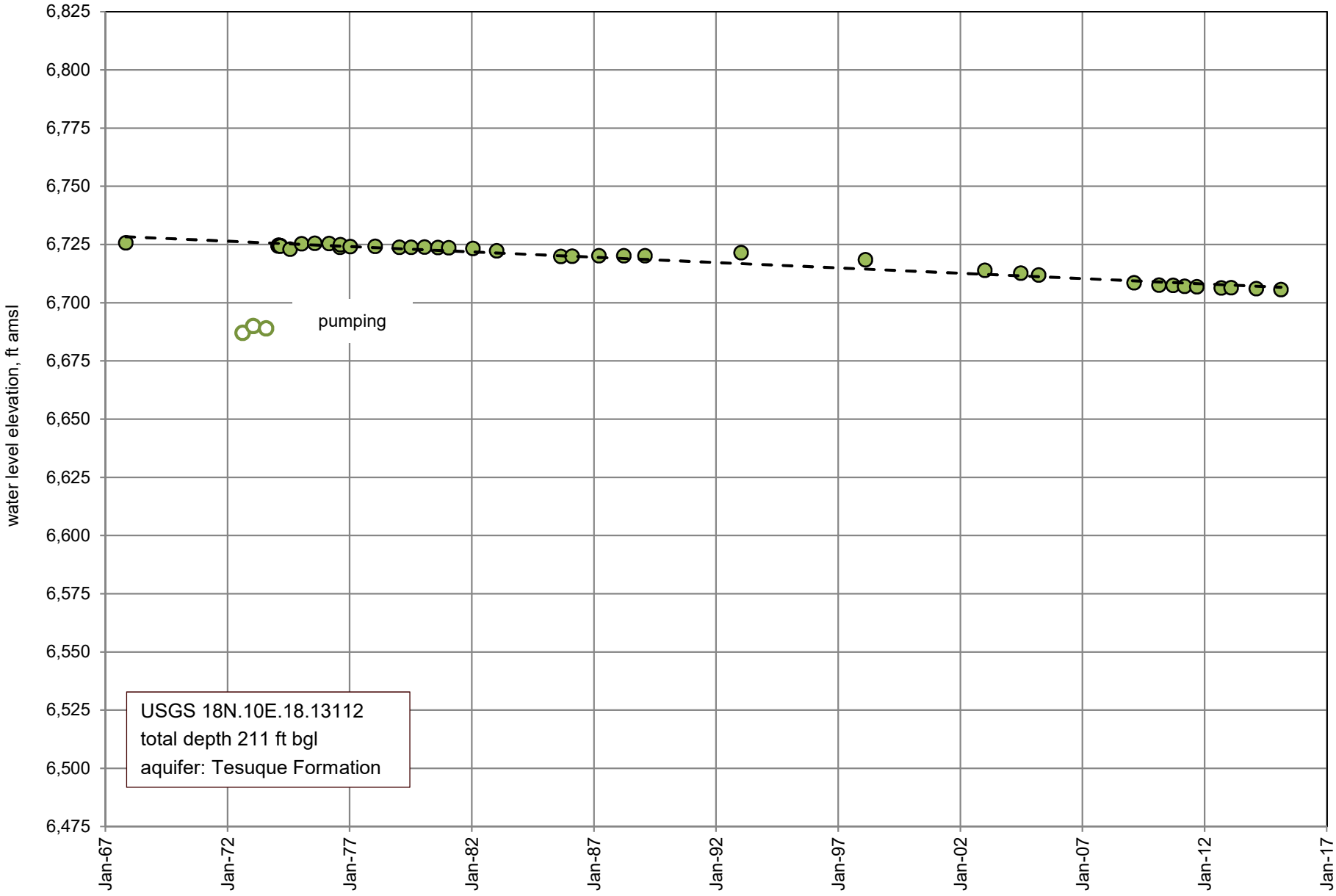


Figure B1. Graph showing historical water levels in U.S. Geological Survey monitored well 18N.10E.18.13112.

Appendix C.

Potential point source pollution sites in the vicinity of Vista Redonda MDWCA

Figure C1. Potential sources of contamination in the vicinity of Vista Redonda MDWCA identified using NMED EGIS Mapper tool, Santa Fe County, New Mexico.

Appendix D.

Water rights and permits

Appendix D.1 1987 Supplemental Order

Appendix D.2 RG-19902 into RG-21573A

Appendix D.3 RG-15616 & RG-15928 et al.

Appendix D.4 Water rights settlement agreement dated May 16, 2013

Appendix D.5 RG-94437

Appendix D.6 RG-94436

Appendix D.7 RG-95071

Appendix D.8 RG-95072 & RG-95073

Appendix D.9 2013 Proof of Beneficial Use

Appendix D.1

1987 Supplemental Order

FILED
AT ALBUQUERQUE
JAN 09 1987
JESSE CASAUS
CLERK

IN THE UNITED STATES DISTRICT COURT

DISTRICT OF NEW MEXICO

STATE OF NEW MEXICO ex rel. S.E. REYNOLDS, State Engineer,	)	
Plaintiff,	)	No. CIV-6639 M
v.	)	Sub-File No. DS-219
R. LEE AAMODT, et al.,	)	Vista Redonda Mutual Domestic Water
Defendants.	)	Consumers' Association

SUPPLEMENTAL ORDER

THIS MATTER having come before the Court on the plaintiff's Amended Offer of Judgment, and the court having considered the said Offer, the hydrographic survey and other evidence on file, and being otherwise fully advised in the premises, finds:

1. Name of Defendant: Vista Redonda Mutual Domestic Water Consumers' Association

2. The Court has jurisdiction of the parties hereto and the subject matter herein.

3. The State Engineer's hydrographic survey and report relating to the Defendant's water rights have been introduced into the record and the same hereby are incorporated and made a part of this Order; that said hydrographic survey and report contain a true and correct summary of the contents of the instruments referred to therein.

4. The parties hereto have accepted an Offer of Judgment concerning the Defendant's water rights and said Offer of Judgment is hereby approved.

5. The Defendant has a right to withdraw public surface and underground waters from the Nambe-Pojoaque River Stream System as follows:

   A. Purpose - Irrigation:
   None, except as provided in paragraph 11, below.

   B. Purpose - Domestic (underground water):

1950

1. State Engineer File No.: RG-15616
   Priority: 04-08-68 (month-day-year)
   Point of diversion: NW¼ SE¼ NE¼, Sec. 7, T. 18 N., R. 10 E.
   Amount of Water: Not to exceed three (3.0) acre-feet per year from the well, subject to the diligent development of the beneficial use of water.

2. State Engineer File No.: RG-15928
   Priority: 07-24-68 (month-day-year)
   Point of diversion: SE¼ SE¼ NE¼, Sec. 7, T. 18 N., R. 10 E.
   Amount of water: Not to exceed three (3.0) acre-feet per year from the well, subject to the diligent development of the beneficial use of water.

3. State Engineer File No.: RG-15616 & RG-15928
   Priority: As hereafter determined by the Court for the Alto Ditch.
   Point of diversion: Through wells RG-15616 and RG-15928.
   Amount of water: Diversion not to exceed 8.08 acre-feet per annum; consumptive use not to exceed 4.04 acre-feet per annum.

4. State Engineer File No.: RG-19043
   Priority: 03-18-1971 (month-day-year)
   Location of Well: NW¼ NE¼ NE¼, Sec. 7, T. 18 N, R. 10 E.
   Amount of Water: Not to exceed a diversion of three acre-feet per year from the well, subject to the diligent development of the beneficial use of water.

5. State Engineer File No.: RG-19044
   Priority: 03-18-1971 (month-day-year)
   Location of Well: SE¼ NE¼ SW¼, Sec. 6, T. 18 N., R. 10 E.
   Amount of Water: Not to exceed a diversion of three acre-feet per year from the well, subject to the diligent development of the beneficial use of water.

6. State Engineer File No.: RG-19902

Priority: 12-06-1971 (month-day-year)
Location of Well: SE¼ SW¼ NE¼, Sec. 7, T. 18 N., R. 10 E.
Amount of Water: Not to exceed a diversion of three acre-feet per year from the well, subject to the diligent development of the beneficial use of water.

7. State Engineer File No.: RG-19903
Priority: 12-06-1971 (month-day-year)
Location of Well: NW¼ NE¼ NW¼, Sec. 7, T. 18 N., R. 10 E.
Amount of Water: Not to exceed a diversion of three acre-feet per year from the well, subject to the diligent development of the beneficial use of water.

8. State Engineer File No.: RG-21573
Priority: 07-28-1972 (month-day-year)
Location of Well: SW¼ NE¼ NW¼, Sec. 7, T. 18 N., R. 10 E.
Amount of Water: Not to exceed a diversion of three acre-feet per year from the well, subject to the diligent development of the beneficial use of water.

9. The above wells designated by State Engineer File Nos. RG-15616 and RG-15928 and the underground water pumped by virtue thereof not to exceed a withdrawal of 14.08 acre-feet per annum may be connected together by pipelines and the water used in a common domestic water system; provided, however, that each well shall be equipped with a meter and withdrawals from each well shall not exceed 7.04 acre-feet per annum. Nothing herein shall be construed or understood to permanently limit the amount of water to be withdrawn from the above wells in the event additional water rights are transferred to said wells.

10. The total combined withdrawals from wells RG-15616, RG-15928, RG-19043, RG-19044, RG-19902, RG-19903, and RG-21573 shall not exceed 29.08 acre-feet per annum, being 7.04 acre-feet per annum from each of wells RG-15616 and RG-15928 and 3 acre-feet per

annum from each wells RG-19043, RG-19044, RG-19902, RG-19903 and RG-21573, measured at each well.

11. The total irrigation from the water distribution system served by wells RG-15616, RG-15928, RG-19043, RG-19044, RG-19902, RG19903, and RG-21573 including irrigation of non-commercial trees, lawns and gardens shall be limited to 4.69 acres. Exposed water surface areas (swimming pools, sewage lagoons, etc.) shall be included in the 4.69 acres on an equivalent consumptive use basis; that is, the evaporation from the exposed water surface area plus the consumptive use from the irrigation of trees, lawns and gardens shall not exceed the consumptive use that would result from the irrigation of 4.69 acres on non-commercial trees, lawns and gardens in the area.

12. Place of Use: The area served by Vista Redonda Mutual Domestic Water Consumers' Association, including Vista Redonda Subdivision Units A through G, within Sections 6 and 7, Township 18 North, Range 10 East, N.M.P.M., and two contiguous parcels therein, as recorded in Santa Fe County, New Mexico.

13. The Defendant has no other surface or underground water rights in the Nambe-Pojoaque River Stream System.

14. That the Defendant, its agents, employees, privies, co-tenants, tenants, assigns, attorneys, and any and all other persons having constructive knowledge of the restraining order should be enjoined from any use of the surface or underground water of the Nambe-Pojoaque River Stream System for any purpose except in strict accordance with the water rights set out hereinabove.

15. Wells RG-15616, RG-15928, RG-19902, RG-19903, RG-19043, RG-19044 and RG-21573 shall each be equipped with a totalizing meter of a type approved by and installed in a manner acceptable to the State Engineer. Records of the amount of water diverted from each of the above numbered wells shall be submitted to

the State Engineer on or before the 10th day of January, April, July and October of each year for the three preceding calendar months.

IT IS THEREFORE ORDERED that the Defendant, Vista Redonda Mutual Domestic Water Consumers' Association, be and hereby is adjudicated to have a good and valid water right as set forth above.

IT IS FURTHER ORDERED that the Defendant, its agents, employees, privies, co-tenants, tenants, assigns, attorneys, and any and all persons having constructive knowledge of the re-straining order, be and they hereby are permanently enjoined and restrained from any use of the surface and underground water of the Nambe-Pojoaque River Stream System, except in strict accordance with the water rights set out hereinabove.

DATED this 8th day of ~~December~~ January, 1987, ~~1986.~~

SENIOR DISTRICT JUDGE

APPROVED:

Attorney for Defendant, Vista Redonda Mutual Domestic Water Consumers' Association

Special Assistant Attorney General for Plaintiff

HINKLE, COX, EATON, COFFIELD & HENSLEY

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PAUL J. KELLY JR.
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DOUGLAS L. LUNSFORD
T. CALDER EZZELL, JR.
WILLIAM B. BURFORD*
RICHARD E. OLSON
RICHARD A. SIMMS
DEBORAH NORWOOD*
RICHARD R. WILFONG*
STEVEN D. ARNOLD
JAMES J. WECHSLER
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JEFFREY L. FORNACIARI
JEFFREY D. HEWETT*

JAMES BRUCE

JERRY F. SHACKELFORD*
ALBERT L. PITTS
FRED W. SCHWENDIMANN
THOMAS D. HAINES, JR.
THOMAS M. HNASKO
MICHAEL F. MILLERICK
FRANKLIN H. McCALLUM*
ALLEN G. HARVEY*
GREGORY J. NIBERT
JUDY K. MOORE*
DAVID T. MARKETTE*
JAMES R. McADAMS*
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JAMES M. HUDSON
MACDONNELL GORDON
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WILLIAM P. JOHNSON*

OF COUNSEL
ROY C. SNODGRASS, JR.
O. M. CALHOUN
MACK EASLEY
JOE W. WOOD

CLARENCE E. HINKLE (1901-1985)
W. E. BONDURANT, JR. (1913-1973)
ROBERT A. STONE (1906-1981)

*NOT LICENSED IN NEW MEXICO

June 12, 1986

HAND DELIVERED

Sherry J. Tippett
Special Assistant Attorney
General
State Engineer Office
Bataan Memorial Building
Santa Fe, New Mexico 87503

Re: State of New Mexico ex rel. S. E. Reynolds, State Engineer v. Aamodt, et al., U.S.D.C. No. 6639, Subfile DS-219

Dear Ms. Tippett:

I'm returning herewith the offers of judgment you provided on June 10th.

As you know, my client is a mutual domestic water consumers' association with the responsibility to supply water to 75 individual users. Physically, the community system consists of seven wells and a 29,000 gallon storage tank, all of which are tied together as a unit. As the files of your office indicate, the water rights are also tied together and exercised to serve the community as a whole.

In 1971 when Judge Payne entered the existing order in Subfile No. DS-219, five of our wells had not been drilled or completed. Instead of providing the association with six subfiles in the referenced action, i.e., DS-219, RG-19043, RG-19044, RG-19902, RG-19903, and RG-21473, we would prefer to maintain one subfile as a community supplier and to amend the existing order to reflect the individual RG numbers, points of diversion, and the total right of 29.08 acre feet in one instrument. If it is administratively too cumbersome for the State Engineer Office to file the motion to amend, I will do so myself.

Please let me know whether you have any objection to this procedure. Also, I would like to amend the existing decree to describe additionally "the periods and place of use" as required

Appendix D.2

RG-19902 into RG-21573A

Revised December 1971

IMPORTANT - READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM

341

Application for Permit to Change Location of Well

Date Received September 20, 2000 File No. (RG-19902 into RG-21573)-A

1. Name of Water Right Owner Vista Redonda Water and Property Owners' Association
   Street or Post Office Address P.O. Box 375
   City and State Tesuque, NM Zip Code 87574

2. Source of water supply Shallow (artesian or shallow water aquifer), located in Rio Grande (name of underground basin).

3. Well from which rights are to be severed:

   (a) Well is in the SE ¼ SW ¼ NE ¼, Section 7 Township 18N Range 10E N.M.P.M., or Tract No. _____ of Map No. _____ of the _____.

   (b) Is well to be plugged No; If not, state what use retained Divert water under RG-19902.

4. Application is made to change location of well for the following reasons (If well is to be used for only part of original right describe that part by legal description under item (6): To provide move even distribution of pumping throughout the subdivision.

5. Well to which transfer is to be made:
   (a) Located in the ¼ NW ¼ SE ¼, Section 6 Township 18N Range 10E N.M.P.M., or Tract No. _____ of Map No. _____ of the _____
   on land owned by Chris & Anna Van Schayk
   (b) Quantity of water to be appropriated 3.0 acre feet applied to 640 acres of land; if not for irrigation, specify purpose domestic, subdivision & related
   (c) If existing well, give File No. _____
   (d) If a new well, give name of driller Not yet contracted
   (e) Outside diameter of casing 6 or less inches; Approximate depth to be drilled 800 feet.

8. Additional statements or explanations Diversion of water under RG-21573 is allowed in sub file DS-319, Supplemental Order dated January 8, 1987, United States District Court, District of New Mexico No. CIV 6639M. Applicant proposes to discontinue the use of well RG-19902 & RG-21573, described above, for the water allowed under RG-21573 and to divert the 3.0 acre-feet per year allowed under RG-21573 from the new well described above. Applicant has an easement from the owner of the land to drill and maintain the proposed well. Vista Redonda Water and Property Owners' Association was formerly known as Vista Redonda MDWCA

STATE ENGINEER OFFICE
ALBUQUERQUE, NEW MEXICO
02 MAR 20 AM 8

I, Dennis R. Cooper, affirm that the foregoing statements are true to the best of my knowledge and belief and that I am the agent for owner and holder of said water right.
(sole, partial, agent for, etc.,)

Vista Redonda Water and Property Owners' Association, Applicant,

By: Dennis R. Cooper

OFFICE OF STATE ENGINEER
SANTA FE, NEW MEXICO
00 SEP 20 AM 10 39

ACTION OF THE STATE ENGINEER

After notice pursuant to statute and by authority vested in me, this application is approved provided it is not exercised to the impairment of any others having existing rights; ~~to the provisions of the statutes and regulations of the State Engineer pertaining to the drilling of xxxxxxxxxxxxx wells be complied with, and further subject to the following conditions:~~

and is not detrimental to the public welfare or contrary to the conservation of water within the state; further provided that all rules and regulations of the State Engineer pertaining to the drilling of shallow wells ~~be complied with and further subject to the attached conditons of approval:~~

Proof of completion of well shall be filed on or before April 10 2003

Witness my hand and seal this 13 day of April, A.D., 2001

Thomas C. Turney, State Engineer

By: Brian Carriego File No. (RG-19902 into RG-21573)-A

Brian Carriego
Water Rights Division

CONDITIONS OF APPROVAL

APPLICANT: Vista Redonda Water & Property Owner's Association
FILE NO.: (RG-19902 into RG-21573)-A

1. This application is approved as follows:

Permit No.: (RG-19902 into RG-21573)-A

Priority: July 28, 1972

Source: Ground Waters of the Rio Grande Basin

Point of Diversion:

Move From: Well # (RG-19902 into RG-21573)
SE1/4 SW1/4 NE1/4, Section 7, Township 18 North, Range 10 East, New Mexico Principal Meridian.

Move To: Well # (RG-19902 into RG-21573)-A
NW1/4 SE1/4, Section 6, Township 18 North, Range 10 East, New Mexico Principal Meridian

Purpose of Use: Domestic, subdivision, and related

Amount of Water: 3.0 acre-feet per annum

02 MAR 20 PM 1:50
STATE ENGINEER OFFICE
ALBUQUERQUE, NEW MEXICO

2. Water diverted from well no. (RG-19902 into RG-21573)-A shall be metered by a totalizing meter or meters of a type and at a location approved by and installed in a manner acceptable to the State Engineer. The applicant shall provide the make, model, serial number, initial reading, units, multiplier, and the date of installation of the meter to the State Engineer prior to any diversion of water under this permit.

3. Records of the total amount of water diverted from well no. (RG-19902 into RG-21573)-A shall be submitted to the State Engineer, in writing, on or before the 10th day of January, April, July, and October for the previous three (3) calendar months.

4. The permitee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

5. Proof of Completion of Well shall be filed on or before April 10, 2003.

Witness my hand and seal this 13 day of April, A.D., 2001.

Thomas C. Turney
State Engineer

by: Brian Gallegos
Water Rights Division

STATE ENGINEER OFFICE
ALBUQUERQUE, NEW MEXICO
02 MAR 20 PM 1:50

OFFICE OF STATE ENGINEER
SANTA FE, NEW MEXICO

2008 OCT 24 PM 2:20

Attachment A

DATE: October 24, 2008

TO: OFFICE OF THE STATE ENGINEER

FR: Dennis Cooper for the VISTA REDONDA WATER AND PROPERTY OWNERS ASSOCIATION aka VISTA REDONDA MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION

RE: VERIFICATION OF WATER RIGHTS AND PERMIT COMPLIANCE

We are to receive state funding for upcoming project that involves repair of construction for this water system and need to verify that we are in compliance with all OSE statutes and regulations. Please review the information provided below, complete Attachment B, and return it to the address listed theron.

OSE FILE NUMBER:

RG-15616, RG-15928, RG-15616 & RG-15928, RG-19403, RG-19044, RG-19902, RG-19903, RG-21573, RG-19902 into RG-21573, RG-19902 into RG-21573-A

LOCATION OF POINT OF DIVERSION

RG-15616	NW ¼ SE ¼ NE ¼ Section 7, T18N, R10E
RG-15928	SE ¼ SE ¼ NE ¼ Section 7, T18N, R10E
RG-19403	NW ¼ NW ¼ NE ¼ Section 7, T18N, R10E
RG-19044	SE ¼ NE ¼ SW ¼ Section 7, T18N, R10E
RG-19902	SE ¼ SW ¼ NE ¼ Section 7, T18N, R10E
RG-19903	NW ¼ NE ¼ NW ¼ Section 7, T18N, R10E
RG-19902 into RG-21573	SE ¼ SW ¼ NE ¼ Section 7, T18N, R10E
RG-19902 into RG-21573-A	NW ¼ SE ¼ Section 6, T18N, R10E

PROJECT DESCRIPTION

Drinking water improvements to include replacement of the approximate 3.5 miles of 50 year old 3 inch distribution pipeline, and to install more than one mile of new pipe to transmit water from the wells to the storage tanks before distributing the water to the users on the system. All 82 service connections will be replaced as will all existing meters (approximately 62). Five new fire hydrants are included and the existing fire hydrants will be connected to the new distribution system. The existing pipeline is in the County road system serving Vista Redonda, so the project will include trenching in that road system to install the new pipes, and then filling and compacting the trench and bring the road back to the County standard.

LIST OF DOCUMENTS PROVIDED TO OSE

Supplemental Order Sub-File No. DS-219 in the name of Vista Redonda Mutual domestic Water Consumers' Association on Cause No. CIV-6639 M, filed January 9, 1987.

Permit RG-19902 into RG-21573-A issued April 13, 2001

Attachment B
DATE:

TO: Dennis R. Cooper

Title: Consulting Engineer

Name of water system: VISTA REDONDA MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION

Address of water system including city and zip: P.O. Box 375, Tesuque, NM 87574

Phone number of contact for project: 505-983-4366

Email of contact for project: dcooper@nets.com

FROM: Name of OSE representative

RE: VERIFICATION OF WATER RIGHTS AND PERMIT COMPLIANCE

I have reviewed the project proposal and materials described in Attachment A (attached) from [NAME OF WATER SYSTEM OR ENTITY APPLYING FOR FUNDS], as well as available OSE files. Based on this information:

_✓_ It appears that the pertinent statutory and regulatory requirements pertaining to the OSE responsibilities have been met and that the above named water system or entity applying for funds is in compliance.

_____It appears that additional documentation must be provided or actions must be taken to bring this system into compliance prior to implementation of this project, as follows:

a. If water rights, permit requirements, reporting requirements, or any other statutory or regulatory requirement has not been met, what is required to bring the system into compliance?

b. Will the project require a water rights permit?

c. If so, what is the process for acquiring the permit?

d. Are there any water laws, rules or policies that may impose some difficulties in acquiring a permit?

OTHER RELEVANT ISSUES:

a. Is OSE aware of any water availability limitations that may affect the project?

b. Does OSE have any other comments concerning the proposal?

PROJECT AND FILES REVIEWED BY:

J Pompeo 10/28/08

Signature of OSE employee Date

Jeff Pompeo 827-6120

Printed name of OSE employee Phone number

Water Rights Division

Title

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
SANTA FE

THOMAS C. TURNEY
State Engineer

BATAAN MEMORIAL BUILDING, ROOM 101
POST OFFICE BOX 25102
SANTA FE, NEW MEXICO 87504-5102
(505) 827-6175
FAX: (505) 827-6188

April 13, 2001

Vista Redonda Water and
Property Owner's Association
P.O. Box 375
Tesuque, NM 87574

RE: File No. (RG-19902 into RG-21573)-A

Greetings:

Enclosed find the above referenced Permit to Change Location of Well which has been approved and is subject to the Conditions of Approval attached to the permit.

Please note that proof of completion of well shall be filed with this office on or before April 10, 2003.

If I can be of further assistance, please do not hesitate to contact me at 827-3518.

Sincerely,

by: Brian Gallegos
Brian Gallegos
Water Rights Division

02 MAR 20 PM 1:50
STATE ENGINEER OFFICE
ALBUQUERQUE, NEW MEXICO

BG:egr

Enclosure

cc: District I

OFFICE of the STATE ENGINEER
WATER RIGHTS DIVISION
MEMORANDUM

DATE: April 10, 2001

TO: Vince Chavez, Water Rights Division

FROM: Brian Gallegos, Water Rights Division

SUBJECT: Recommendation for Application No. (RG-19902 into RG-21573)-A for Permit to Change Location of Well of the Underground Waters of the Rio Grande Basin.

History:

Notice is here by given that on September 20, 2000, Vista Redonda Water and Property Owners' Association, P. O. Box 375, Tesuque, New Mexico, 87574, filed with the State Engineer Application (RG-19902 into RG-21573)-A for Permit to Change Location of Well of the Underground Waters of the Rio Grande Basin.

The applicant proposes to discontinue the diversion of 6.0 acre-feet per annum from Well RG-19902 into RG-21573, located in the SE ¼ SW ¼ NE ¼, Section 7, Township 18 North, Range 10 East, New Mexico Principal Meridian, and commence the diversion of 3.0 acre-feet of water per annum from the proposed well (RG-19902 into RG-21573)-A, which will be located in the NW ¼ SE ¼ of Section 6, Township 18 North, Range 10 East, New Mexico Principal Meridian, on land owned by Chris and Anna Van Schayk.

On January 19, 2001, Notice of Publication was issued to the applicant.

The proposed application was advertised correctly in The Albuquerque Journal on January 26, 2001, February 2, 2001, and February 9, 2001.

On February 12, 2001, the Affidavit of Publication was filed with the Office of the State Engineer.

No objections or protests were filed concerning this application.

02 MAR 20 PM 1:50
STATE ENGINEER OFFICE
ALBUQUERQUE, NEW MEXICO

Considerations:

Diversion of water under RG-21573 is allowed in Subfile DS-219, Supplemental Order dated January 8, 1987, United States District Court, District of New Mexico, No. CIV 6639M. Applicant proposes to discontinue the use of well RG-19902 into RG-21573, described above, for the water allowed under RG-21573 and to divert the 3.0 acre-feet per annum allowed under RG-21573 from the proposed well described above. The applicant will continue to divert 3.0 acre-feet per annum from Well RG-19902 into RG-21573 allowed under RG-19902. Applicant has an easement from the owner of the land to drill and maintain the proposed well. Vista Redonda Water and Property Owners' Association was formerly known as Vista Redonda MDWCA.

There is no increase in the amount of water being diverted under this application. Therefore, it is the opinion of the writer that approval of the subject Application will not be detrimental to other users of surface and underground water in the area. Approval of this application is not contrary to conservation of water within the state since there will be no increase in the amount of water right with this permit. Further, the author is of the opinion that approval of this application will not be detrimental to the public welfare of the State of New Mexico because the use of water for the domestic, subdivision, and related purposes is a beneficial use.

Recommendation:

Approval of Application is recommended in accordance with the rules and regulations of the State Engineer and with the following conditions of approval:

1. This application is approved as follows:

Permit No.:
(RG-19902 into RG-21573)-A

Priority:
July 28, 1972

Source:
Ground Waters of the Rio Grande Basin

02 MAR 20 PM 1:50
STATE ENGINEER OFFICE
ALBUQUERQUE, NEW MEXICO

Point of Diversion:

Move From: Well # (RG-19902 into RG-21573)
SE1/4 SW1/4 NE1/4, Section 7, Township 18 North, Range 10 East, New Mexico Principal Meridian

Move To: Well # (RG-19902 into RG-21573)-A
NW1/4 SE1/4, Section 6, Township 18 North, Range 10 East, New Mexico Principal Meridian

Purpose of Use:

Domestic, subdivision, and related

Amount of Water:

3.0 acre-feet per annum

2. Water diverted from well no. (RG-19902 into RG-21573)-A shall be metered by a totalizing meter or meters of a type and at a location approved by and installed in a manner acceptable to the State Engineer. The applicant shall provide the make, model, serial number, initial reading, units, multiplier, and the date of installation of the meter to the State Engineer prior to any diversion of water under this permit.

3. Records of the total amount of water diverted from well no. (RG-19902 into RG-21573)-A shall be submitted to the State Engineer, in writing, on or before the 10th day of January, April, July, and October for the previous three (3) calendar months.

4. The permitee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

5. Proof of Completion of Well shall be filed on or before April 10, 2003.

02 MAR 20 PM 1:50
STATE ENGINEER OFFICE
ALBUQUERQUE, NEW MEXICO

STATE OF NEW MEXICO
County of Bernalillo SS

Bill Tafoya, being duly sworn, declares and says that he is Classified Advertising Manager of **The Albuquerque Journal**, and that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Session Laws of 1937, and that payment therefore has been made of assessed as court cost; that the notice, copy of which is hereto attached, was published in said paper in the regular daily edition, for 3 times, the first publication being on the 26 day of Jan, 2001, and the subsequent consecutive publications on Feb 2, 9, 2001.

Bill Tafoya

Sworn and subscribed to before me, a Notary Public, in and for the County of Bernalillo and State of New Mexico this 9 day Feb of 2001.

OF
Sam
NO
STATE
My Commission Expires:

PRICE 111.37

Statement to come at end of month.

ACCOUNT NUMBER C80741

CLA-22-A (R-1/93)

Notice is hereby given that on September 20, 2000, Vista Redonda Water and Property Owners' Association, P.O. Box 375, Tesuque, New Mexico 87574, filed with the State Engineer Application (RG-19902 into RG-21573) for Permit to Change Location of Well of the Underground Waters of the Rio Grande Basin.

The applicant proposes to discontinue the diversion of 8.0 acre-feet per annum from Well RG-19902 in to RG-21573, located in the SE ¼ SW ¼ NE ¼, Section 7, Township 18 North, Range 10 East, New Mexico Principal Meridian, and commence the diversion of 3.0 acre-feet of water per annum from the proposed well, which will be located in the NW ¼ SE ¼ of Section 6, Township 18 North, Range 10 East, New Mexico Principal Meridian, on land owned by Chris and Anna Van Schayk.

Diversion of water under RG-21573 is allowed in subfile DS-219, Supplemental Order dated January 8, 1987, United States District Court, District of New Mexico, No. CIV 6639M. Applicant proposes to discontinue the use of well RG-19902 into RG-21573, described above, for the water allowed under RG-21573 from the proposed well described above. The applicant will continue to divert 3.0 acre-feet per annum allowed under RG-21573 from the proposed well described above. The applicant will continue to divert 3.0 acre-feet per annum from Well RG-19902 into RG-21573 allowed under RG-19902. Applicant has an easement from the owner of the land to drill and maintain the proposed well. Vista Redonda Water and Property Owners' Association was formerly known as Vista Redonda MDWCA.

Any person, firm, or corporation or other entity objecting that the granting of the application will be detrimental to the objector's water right shall have standing to file objections or protests. Any person, firm or corporation or other entity objecting that the granting of the application will be contrary to the conservation of water within the state or detrimental to the welfare of the state and showing that the objector will be substantially and specifically affected by the granting of the application shall have standing to file objections or protests. Provided, however, that the State of New Mexico, or any of its branches, agencies, departments, boards, instrumentalities, and institutions and all political subdivisions of the state and their agencies, instrumentalities, and institutions shall have standing to file objections or protests. The objection or protest shall be in writing and shall set forth specific reasons why the application should not be approved and must be filed, in triplicate, with Thomas C. Turney, State Engineer, P.O. Box 25102, Santa Fe, New Mexico 87504-5102, not later than ten (10) days after the date of the last publication of this notice. Valid objections or protests must be legible, signed, and include a complete mailing address. If no valid objection or protest is filed, the State Engineer will evaluate the application for impairment to existing water rights, public welfare of the state, and conservation of water within the state prior to final action on the application. Journal: January 26, February 2, 9, 2001

02 MAR 20 PM 1:50
STATE ENGINEER
ALBUQUERQUE, NEW MEXICO
OFFICE

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
SANTA FE

THOMAS C. TURNEY
State Engineer

BATAAN MEMORIAL BUILDING, ROOM 101
POST OFFICE BOX 25102
SANTA FE, NEW MEXICO 87504-5102
(505) 827-6175
FAX: (505) 827-6188

January 19, 2001

Vista Redonda Water and Property Owners' Association
P. O. Box 375
Tesuque, New Mexico 87574

RE: Application for Permit to Change Location of Well (RG-19902 into RG-21573)-A

Greetings:

Enclosed is the Notice for Publication for the above numbered application. Please have the Notice published and proof of publication filed in this office according following the instructions.

The following notice shall be published at applicant's expense once a week for three (3) consecutive weeks in a newspaper of general circulation in the stream system, or in the case of an underground water appropriation, in a newspaper of general circulation in the county wherein the well is to be drilled. First publication should be made as soon as possible after receipt of this notice. Publisher's affidavit of such publication must be filed with the State Engineer within sixty (60) days from the date hereon. If the application is for a new appropriation, failure to file proof of publication within the time allowed shall cause postponement of the priority date of the application to the date of receipt of such proof in proper form. In the case of any other type of application, failure to file proofs within the time allowed will cause the application to be cancelled.

The accuracy of the content of this Notice is the responsibility of the applicant and the State Engineer is not obligated for any additional expense incurred by the necessity of re-advertisement. If an error is found in the enclosed notice, or if you disagree with the content, please notify this office before presenting it to the newspaper. It is also your responsibility to ensure that the legal advertisement in the newspaper is accurate and that it contains all the information set forth in the enclosed Notice for Publication. You should check the first publication and advise the newspaper of any necessary corrections.

01 JAN 22 PM 1:50
STATE ENGINEER OFFICE
ALBUQUERQUE, NEW MEXICO

This notice is not a permit, and neither issuance of this Notice nor lack of protest thereto, in any way, indicates favorable action by the State Engineer or approval of the application as requested.

If I may be of further assistance, please call me at (505) 827-3518.

Sincerely,

Brian Gallegos
Water Rights Division

Enclosure

xc: District I-Albuquerque

STATE ENGINEER OFFICE
ALBUQUERQUE, NEW MEXICO
02 MAR 20 PM 1:50

Notice is here by given that on September 20, 2000, Vista Redonda Water and Property Owners' Association, P. O. Box 375, Tesuque, New Mexico, 87574, filed with the State Engineer Application (RG-19902 into RG-21573)-A for Permit to Change Location of Well of the Underground Waters of the Rio Grande Basin.

The applicant proposes to discontinue the diversion of 6.0 acre-feet per annum from Well RG-19902 into RG-21573, located in the SE ¼ SW ¼ NE ¼, Section 7, Township 18 North, Range 10 East, New Mexico Principal Meridian, and commence the diversion of 3.0 acre-feet of water per annum from the proposed well, which will be located in the NW ¼ SE ¼ of Section 6, Township 18 North, Range 10 East, New Mexico Principal Meridian, on land owned by Chris and Anna Van Schayk.

Diversion of water under RG-21573 is allowed in subfile DS-219, Supplemental Order dated January 8, 1987, United States District Court, District of New Mexico, No. CIV 6639M. Applicant proposes to discontinue the use of well RG-19902 into RG-21573, described above, for the water allowed under RG-21573 and to divert the 3.0 acre-feet per annum allowed under RG-21573 from the proposed well described above. The applicant will continue to divert 3.0 acre-feet per annum from Well RG-19902 into RG-21573 allowed under RG-19902. Applicant has an easement from the owner of the land to drill and maintain the proposed well. Vista Redonda Water and Property Owners' Association was formerly known as Vista Redonda MDWCA.

Any person, firm, or corporation or other entity objecting that the granting of the application will be detrimental to the objector's water right shall have standing to file objections or protests. Any person, firm, or corporation or other entity objecting that the granting of the application will be contrary to the conservation of water within the state or detrimental to the welfare of the state and showing that the objector will be substantially and specifically affected by the granting of the application shall have standing to file objections or protests. Provided, however, that the State of New Mexico, or any of its branches, agencies, departments, boards, instrumentalities, and institutions and all political subdivisions of the state and their agencies, instrumentalities, and institutions shall have standing to file objections or protests. The objection or protest shall be in writing and shall set forth specific reasons why the application should not be approved and must be filed, in triplicate, with Thomas C. Turney, State Engineer, P. O. Box 25102, Santa Fe, New Mexico 87504-5102, not later than ten (10) days after the date of the last publication of this notice. Valid objections or protests must be legible, signed, and include a complete mailing address. If no valid objection or protest is filled, the State Engineer will evaluate the application for impairment to existing water rights, public welfare of the state, and conservation of water within the state prior to final action on the application.

NOTE TO PUBLISHER: Immediately after the last publication, publisher is requested to file an affidavit of such publication with the Office of the State Engineer, Water Rights Division, P. O. Box 25102, Santa Fe, New Mexico 87504-5102.

02 AM 8:50 PM 1:50
STATE ENGINEER OFFICE
ALBUQUERQUE, NEW MEXICO

DENNIS R. COOPER
CONSULTING ENGINEER
115 E. Alicante
SANTA FE, NEW MEXICO 87505-4651

Telephone 505-983-4366
Facsimile 505-983-4306
Email dcooper@nets.com

September 19, 2000

Office of the State Engineer
Attn: Mary Young, Water Rights Division
P.O. Box 25102
Santa Fe, NM 87504-5102

Re: Vista Redonda Water & Property Owners' Association—Application to Change Location of Well

Dear Ms. Young:

I have enclosed three copies of an application to change location of well RG-21573. I understand from talking with Mr. Paul Saavedra that the application will have to be advertised. Please send the notice for publication to me.

Please let me know if I can provide further information.

Sincerely,

Dennis R. Cooper

encl

copy w/ encl.: Vista Redonda MDWCA

STATE ENGINEER OFFICE
ALBUQUERQUE, NEW MEXICO
02 MAR 20 PM 1:50

OFFICE OF
STATE ENGINEER
SANTA FE, NEW MEXICO
'00 SEP 20 AM 11 34

Appendix D.3

RG-15616 & RG-15928 et al.

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
Santa Fe

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

BATAAN MEMORIAL BUILDING, ROOM 102
SANTA FE, NM 87504-5102
(505) 827-6120
Fax: (505) 827-6682

August 30, 2010

Vista Redonda, MDWCA
c/o Ed Ryman, President
P. O. Box 375
Tesuque, New Mexico 87574

Re: File No. RG-15616 & RG-15928 et al.

Greetings:

Enclosed is your copy of the above-numbered Permit for supplemental wells to Supplement Underground Waters of the State of New Mexico which has been approved for 8.08 acre-feet per annum subject to the attached Conditions of Approval.

Please note that Proof of Beneficial Use shall be filed in this office on or before June 30, 2012.

Sincerely,

Vincent F. Chavez
Water Rights Division

Enclosure

Revised August 1967

341790

IMPORTANT–READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM

APPLICATION FOR PERMIT

COPY

FOR SUPPLEMENTAL WELLS

Date Received _____ File No. _____

1. Name of applicant Vista Redonda MDWCA
   Mailing address P.O. Box 375
   City and State Tesuque, NM 87574
2. Source of water supply shallow, located in Rio Grande
   (artesian or shallow water aquifer) (name of underground basin)
3. The well is to be located in the see attachment ¼ ¼ ¼, Section _____ Township _____
   Range _____ N.M.P.M., or Tract No. _____ of Map No. _____ of the _____ District,
   on land owned by Applicant.
4. Description of well: name of driller Existing wells;
   Outside Diameter of casing _____ inches; Approximate depth to be drilled _____ feet;
5. Quantity of water to be appropriated and beneficially used 8.08 acre feet,
   (consumptive use, diversion)
   for subdivision, domestic and related purposes.
6. Acreage to be irrigated or place of use 640 acres.

Subdivision	Section	Township	Range	Acres	Owner
Pt	6	18N	10E	640	Various lot &
Pt	7	18N	10E		home owners

7. Additional statements or explanations See Attachment

95 MAY 25 AM 9:29

STATE ENGINEER OFFICE
ALBUQUERQUE NM

I, A. M. Clogston, affirm that the foregoing statements are true to the best of my knowledge and belief and that development shall not commence until approval of the permit has been obtained.

Vista Redonda MDWCA, Permittee,

By: Albert M. Clogston Albert M. Clogston

Subscribed and sworn to before me this 10th day of September, A.D., 19 93.

My commission expires 10-17-93

Notary Public

RECEIVED
MAY 29 1995
STATE ENGINEER OFFICE
DISTRICT ONE

Number of this permit _____

ACTION OF STATE ENGINEER

After notice pursuant to statute and by authority vested in me, this application is approved provided it is not exercised to the detriment of any others having existing rights; further provided that all rules and regulations of the State Engineer pertaining to the drilling of _____ wells be complied with; and further subject to the following conditions: _____

Proof of completion of well shall be filed on or before _____, 19_____

Proof of application of water to beneficial use shall be filed on or before _____, 19_____

Witness my hand and seal this _____ day of _____, A.D., 19_____.

S. E. Reynolds, State Engineer

By: _____.

INSTRUCTIONS

This form shall be executed, preferably typewritten, in triplicate and shall be accompanied by a filing fee of $5.00. Each of triplicate copies must be properly signed and attested.

A separate application for permit must be filed for each well used.

Secs. 1–4—Fill out all blanks fully and accurately.

Sec. 5—Irrigation use shall be stated in acre feet of water per acre per annum to be applied on the land. If for municipal or other purposes, state total quantity in acre feet to be used annually.

Sec. 6—Describe only the lands to be irrigated or where water will be used. If on unsurveyed lands describe by legal subdivision "as projected" from the nearest government survey corners, or describe by metes and bounds and tie survey to some permanent, easily located natural object.

Sec. 7—If lands are irrigated from any other source, explain in this section. Give any other data necessary to fully describe water right sought.

AMENDED ATTACHMENT TO APPLICATION FOR SUPPLEMENTAL WELLS FILED BY VISTA REDONDA MDWCA

Vista Redonda MDWCA is allowed to divert 8.08 acre feet of water per year (with the consumptive use not to exceed 4.04 acre-feet per year) combined from well nos. RG-15616 and RG-15928 under subfile DS-219, Paragraph No. 3, Civil Suit 6639, United States District Court, District of New Mexico, filed January 9, 1987. Under State Engineer Permit RG-15616 & RG-15928, approved January 3, 1991, Vista Redonda MDWCA is allowed a combined diversion of 14.08 acre-feet per year from well nos. RG-15616 and RG-15928. This 14.08 acre-feet per year includes the 8.08 acre-feet per year in Paragraph No. 3 of Subfile DE-219, in addition to the 3.0 acre-feet per year allowed in Paragraph No. 1 of Subfile DS-219 and the 3.0 acre-feet per year allowed under Paragraph No. 2 of Subfile DS-219. Well no. RG-15616 is located in the NW1/4, NE1/4, NE1/4 of Section 7, T18N, R10E, NMPM, and well no. RG-15928 is located in the SE1/4, SE1/4, NE1/4 of said section 7.

Applicant proposes under this application to continue to divert the 8.08 acre-feet of water per year (allowed under Paragraph No.3, Subfile DS-219) from the above described wells, and from well nos. RG-19903 (located in the NW1/4, NE1/4, NW1/4 of said section 7) and well no. RG-21573 (located in the SE1/4, SW1/4, NE1/4 of said section 7). All four wells are owned by the Applicant. Other water rights owned by Vista Redonda MDWCA allowed under Subfile DS-219 will not be affected by this application. The total water diverted under this application will not exceed 8.08 acre-feet of water per year from all wells, with the total consumptive use not to exceed 4.04 acre-feet of water per year.

RECEIVED
MAY 29 1995
STATE ENGINEER OFFICE
DISTRICT ONE

CONDITIONS OF APPROVAL

Applicant: Vista Redonda MDWCA

Permit No.: RG-15616 & RG-15928 et al.

1. Permit No.: RG-15616 & 15928

   Priority: September 17, 1993

   Source: Ground Water

   Points of Diversion: RG-19903 NE¼ SE¼ located in Section 24, Township 18 North, Range 9 East, New Mexico Principal Meridian

   RG-21573 where X= 594,334 and Y= 1,736,431 New Mexico Coordinate System, Central Zone

   Purpose of Use: Subdivision, Domestic and Related Purposes

   Amount of Water: 8.08 acre-feet per annum combined

2. The maximum amount of water that may be appropriated under this permit is 8.08 acre-feet per annum from wells RG-15616, RG-15928, RG-21573 and RG-19903 combined.

3. Total diversion of water from wells RG-15616, RG-15928, RG-21573 and RG-19903 shall be metered with a totalizing meter, of a type and at a location approved by, and acceptable to the State Engineer.

4. The permittee shall provide the make, model, serial number, initial reading, units, multiplier, and the date of installation of the meter to the State Engineer.

5. Records of the total amount of water diverted from wells No. RG-15616, RG-15928, RG-21573 and RG-19903 for Subdivision, Domestic and Related Purposes shall be submitted to the State Engineer, in writing, on or before the 10th day of each month for the preceding calendar month.

6. The permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

7. Proof of Beneficial Use shall be filed on or before June 30, 2012.

Witness my hand and seal this 30th day of August, 2010

John R. D'Antonio, Jr., P.E.
New Mexico State Engineer

By: _____
Vincent F. Chavez
Water Rights Division

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
Santa Fe

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

BATAAN MEMORIAL BUILDING, ROOM 102
SANTA FE, NM 87504-5102
(505) 827-6120
Fax: (505) 827-6682

July 6, 2010

Vista Redonda MDWCA
c/o Ed Ryman, President
P. O. Box 375
Tesuque, New Mexico 87574

CERTIFIED MAIL RETURNED RECEIPT REQUESTED

Re: File No. RG-15616, RG-15928, RG-19903 and RG-21573

Greetings:

In review of OSE water right File No. RG-15616, it appears that there is an outstanding application for permit for Supplemental wells which had been filed May 29, 1995. Speaking with your consultant at the time, Mr. Dennis Cooper, it was understood that this application was to be withdrawn and a new one to combine and commingle all the wells was to be submitted.

If you are still interested in this application please submit a letter confirming this within 15 days of receipt of this letter. If we do not hear from you we will assume you are no longer interested in pursuing this matter and your application will be cancelled without further notice to you.

Sincerely,

Vincent F. Chavez
Water Rights Division

Enclosure

VISTA REDONDA WATER & PROPERTY OWNERS' ASSOCIATION
A Mutual Domestic Water Consumers Association
P.O. Box 375
Tesuque, New Mexico 87574

July 12, 2010

HAND DELIVERED

Mr. Vince Chavez
Water Rights Division
Office of the State Engineer (OSE)
Bataan Memorial Building, Room 102
Santa Fe, New Mexico 87504-5102

RE: File No. RG-15928, RG-15616, RG-19903 and RG-21573
(Vista Redonda Mutual Domestic Water Consumers Association)

Dear Vince:

Thank you for your letter dated July 6, 2010, concerning Vista Redonda's "Application for Permit for Supplemental Wells". Vista Redonda is definitely interested in pursuing the Application as currently filed, and does not wish to withdraw the Application or file a new application to co-mingle all of Vista Redonda's wells.

As you know, on September 10, 1993, Vista Redonda filed an "Application for Permit for Supplemental Wells". In this Application, Vista Redonda asked the OSE to approve a change in point of diversion of 8.08 acre feet of water per year from Vista Redonda well nos. RG-15928 and RG-15616 to Vista Redonda Well Nos. RG-19903 and RG-21573. (See Exhibit 1.) The Application complied with all requirements of 72-12-3, and was accepted for filing by the OSE.

The Application was then advertised, and no persons or parties protested the application. (See Exhibit 2.)

In December 1994, the OSE asked Vista Redonda to attach an addendum to the Application, to state that other permitted water rights in Well Nos. RG-15928 and RG-15616 would not be affected by the Application. By way of background information, well nos. RG-15928 and RG-15616 were originally permitted to divert a combined total of 14.08 acre feet per year. In Vista Redonda's original 1993 Application, Vista Redonda requested a change in point of diversion of only 8.08 acre feet per year from wells RG-15928 and RG-15616. Since these wells were permitted for a combined total of 14.08 acre feet per year, a combined total of 6 acre feet per year would remain in wells RG-15928 and RG-15616 if the change in point of diversion was approved. Vista Redonda

therefore planned to continue to divert the remaining 6 acre feet per year from wells RG-15928 and RG-15616, as it was authorized to do under its original permits.

Thus, in December 1994, the OSE asked Vista Redonda to attach an addendum to the original Application to re-state the obvious: that, from a combined total diversion of 14.08 acre feet, Vista Redonda wanted to change the point of diversion of 8.08 acre feet only (as stated in the original Application), and the remaining 6 acre feet in wells RG-15928 and RG-15616 would not be affected by the Application. Although the original Application fully complied with all requirements of 72-12-3 and had already been accepted for filing by the OSE, Vista Redonda complied with the OSE's December 1994 request. Thus, in 1995, Vista Redonda sent an "Amended Attachment to Application for Supplemental Wells Filed by Vista Redonda MDWCA" to the OSE. (See Exhibit 3.)

In 1995, when Vista Redonda sent the Amended Attachment to the OSE, the OSE told Vista Redonda that it did not need to re-advertise the Application or the Amended Attachment. This statement from the OSE was in conformity with the applicable statutes: neither 72-12-3 nor 72-12-7 require re-advertisement when the OSE requests an amendment or addendum to an original application.

For the next 11 years, the OSE did not act on the Application. During this time, Dennis Cooper, an engineer retained by Vista Redona, contacted the OSE on several occasions to determine the status of the Application. On these occasions, the OSE did not mention anything about possible re-advertisement. Instead, the OSE asked Dennis to send a map of the Vista Redonda MDWCA water system, which Dennis did. (See Exhibit 4.)

Then, in 2006, Brian Gallegos contacted Vista Redonda and said the OSE had changed its mind and now believed Vista Redonda had to re-advertise the application. Dennis Cooper tells me that the OSE continues to take this position.

Vista Redonda does not agree. In 1995 the OSE specifically told Vista Redonda that no re-advertisement of the original Application or Amended Attachment was necessary. And neither 72-12-3 nor 72-12-7 requires an application originally advertised in 1993 to be re-advertised 15 years later because the OSE has not yet acted on the application.

Vista Redonda's request today is the same as it always was, and is the same as stated in the original 1993 Application. Vista Redonda wants to change the point of diversion of 8.08 acre feet from wells RG-15928 and RG-15616. As authorized by its original permits, Vista Redonda will continue to pump the remaining 6 acre feet from RG-15928 and RG-15616.

The Application to change the point of diversion for 8.08 acre feet from wells RG-15928 and RG-15616 is important to Vista Redonda because it concerns the health and safety of our residents. The water supplied by Vista Redonda Mutual Domestic Water Consumers Association is the sole source of water for approximately 65 rural

households, and the uranium levels in wells RG-15928 and RG-15616 sometimes exceed the standards set by the New Mexico Environment Department. To comply with directives from the New Mexico Environment Department, Vista Redonda must transfer some of its permitted water rights from wells RG-15928 and RG-15616 to other wells that do not consistently test high for uranium. If Vista Redonda's application is granted, Vista Redonda can avoid the uranium problems that have concerned both the New Mexico Environment Department and Vista Redonda residents.

The subject wells are all owned by Vista Redonda and are located within the Vista Redonda service area, so the requested transfer will not impair other water rights, and will not conflict with the conservation of water or public welfare. Vista Redonda therefore asks the OSE to consider and grant the Application filed in 1993.

Please feel free to give me a call to discuss this further. My cell phone number is 920-5632 and is probably the easiest way to get in touch with me. I look forward to hearing from you.

Sincerely,

Keitha A. Leonard

President Pro Tem
Vista Redonda Mutual Domestic Water Consumers Association and
Vista Redonda Water and Property Owners Association

Appendix D.4

Water rights settlement agreement dated May 16, 2013

FILED IN MY OFFICE
DISTRICT COURT CLERK
5/18/2013 2:08:15 PM
STEPHEN T. PACHECO

RV

STATE OF NEW MEXICO
COUNTY OF SANTA FE
FIRST JUDICIAL DISTRICT COURT

VISTA REDONDA WATER & PROPERTY OWNERS ASSOCIATION, INC.,

Petitioner,

vs. **D-101-CV-2006-02160**

NEW MEXICO STATE ENGINEER,

Respondent.

AGREED FINAL ORDER APPROVING WATER RIGHTS SETTLEMENT AND DISMISSING ADMINISTRATIVE APPEAL

THIS MATTER having come before the Court upon the joint motion of Petitioner, Vista Redonda Water and Property Owners Association, Inc. , and Respondent, New Mexico State Engineer, collectively, "the Parties," to approve the Water Rights Settlement , attached hereto and made part hereof, and to dismiss this action, and the Court having reviewed the motion, and being sufficiently advised in its premises, therefore enters the following FINAL ORDER:

IT IS HEREBY ORDERED, ADJUDGED AND DECREED:

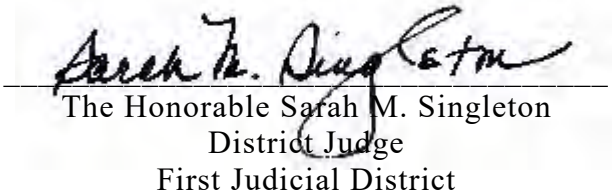
1. Cause No. D-0101-CV-2006-02160 is reinstated solely for the purpose of approving the Parties' Water Rights Settlement and entering this Final Order.

2. Pursuant to NMAC 19.27.5.11(E)(1), the Water Rights Settlement made and entered into by the Parties on May 16, 2013, a true, correct, and complete copy of which is attached hereto, marked **Exhibit A**, and made part hereof is approved.

3. Pursuant to Paragraph 7 of the Water Rights Settlement, this Court shall retain continuing jurisdiction over the Parties to interpret and enforce the terms, provisions, and conditions of the Water Rights Settlement.

4. Subject to the Court's continuing jurisdiction over the Water Rights Settlement, as provided in Paragraph 3, above, Cause No. D-0101-CV-2006-02160 is dismissed with prejudice and without costs assessed against either party. The Parties shall each bear its own attorney fees.

It Is So Ordered.



The Honorable Sarah M. Singleton
District Judge
First Judicial District
Division II

Ordered Jointly Prepared and Approved as to Both Form and Substance by:

HOLLAND & HART, LLP

/s/ Mark F. Sheridan
By: _____
Mark F. Sheridan, Esq.
HOLLAND & HART, LLP
Post Office Box 2208
Santa Fe, New Mexico 87504
TEL: (505) 988-4421

ATTORNEYS FOR VISTA REDONDA WATER & PROPERTY OWNERS ASSOCIATION, INC.

- and -

NEW MEXICO STATE ENGINEER

Approved by Hilary Lamberton per email dated May 15, 2013

By: _____

D.L. Sanders, Esq.
Hilary Lamberton, Esq.
Litigation and Adjudication Program
P.O. Box 25102
Santa Fe, NM 87504-5102
TEL: (505) 827-3823

SPECIAL ASSISTANT ATTORNEYS GENERAL
OFFICE OF THE STATE ENGINEER

6194567_2

WATER RIGHTS SETTLEMENT

THIS WATER RIGHTS SETTLEMENT AGREEMENT ("Agreement") is made and entered into this 16th day of May, 2013, by and between VISTA REDONDA WATER & PROPERTY OWNERS' ASSOCIATION, INC. ("Association"), whose address is P. O. BOX 375, Tesuque, New Mexico 87574 , and the New Mexico State Engineer ("State Engineer"), (collectively, "Parties").

RECITALS

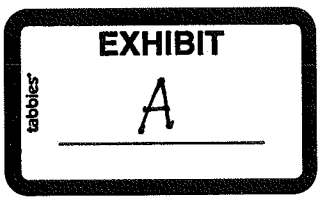
WHEREAS, the State Engineer is vested with the general supervision of waters of the state pursuant to NMSA 1978, § 72-2-1, and in connection therewith is authorized to approve water rights settlements to facilitate changes in the point of diversion of permitted, declared or adjudicated NMSA 1978, § 72-12-1.1 domestic wells; and

WHEREAS, the Association is a mutual domestic water consumers association, incorporated under the Sanitary Projects Act, NMSA 1978, §§ 3-29-1 – 3-29-21, which operates a water supply distribution system in and around the residential subdivision in Santa Fe County, New Mexico, commonly known as Vista Redonda; and

WHEREAS, on September 26, 2006, the Association filed a Petition for Writ of Certiorari ("Petition") in the First Judicial District Court, Santa Fe County, New Mexico, Case No. D-101-CV-2006-02160; and

WHEREAS, the Parties hereto have agreed to enter into this Agreement and to dismiss the Petition;

NOW, THEREFORE, in consideration of the mutual promises set forth herein, the Parties agree as follows:



1. Within one year after the date of dismissal of the Petition, the Association shall file with the State Engineer a map showing the Association's Infrastructure Capacity Area, as defined in 19.27.5.7(J) NMAC, including the Association's water supply distribution system ("ICA Map").

2. Within one year after the date of dismissal of the Petition, the Association will apply for and the State Engineer will issue the Association permits for five (5) domestic wells pursuant to NMSA 1978, § 72-12-1.1, each permitted: (a) to be drilled within the Association's Infrastructure Capacity Area as shown on the ICA Map by January 1, 2030, (b) to serve three or more households, and (c) to divert a maximum of three (3.0) acre feet of water per annum (hereinafter, "Paragraph Two Wells").

3. After the Association's filing of the ICA Map and the State Engineer's issuance of the permits for the Paragraph Two Wells, the State Engineer will not issue a permit for any new domestic wells within the Association's Infrastructure Capacity Area.

4. The Association shall have the right to connect each Paragraph Two Well to the Association's system for the distribution of water to households within its Infrastructure Capacity Area as shown on the ICA Map; provided, however, that the maximum quantity of water that may be diverted from any such well shall not exceed the quantity permitted by the State Engineer.

5. In lieu of drilling any Paragraph Two Well, the Association shall have the right to designate any other permitted well or wells of the Association for all or part of the 3.0 acre-feet of water per annum permitted to be diverted from such Paragraph Two Well; provided, however, that each such change in the permitted point of diversion shall

be subject solely to the approval of the State Engineer. Such approval shall be based upon the State Engineer's determination that the total quantity of water to be diverted per annum from the Association well(s) will not impair the water rights of others. The Association shall provide such information, including any well data and proposed well-pumping schedules, as is reasonably necessary for the State Engineer's impairment analysis. In no event shall the total quantity of water diverted per annum from any one Association well exceed the maximum combined diversion of all water previously permitted by the State Engineer to be withdrawn from such well plus the additional Paragraph Two quantity. In no event shall the total quantity of water diverted per annum from all of the Association's wells, including the Paragraph Two Wells, exceed the maximum combined diversion of all water permitted by the State Engineer to be withdrawn from all such wells.

6. The Association shall have a period of forty (40) years from and after the date of issuance of the permits for the Paragraph Two Wells to develop the full authorized beneficial use of water per annum from each such Well.

7. Within ten (10) days after execution of this Agreement, the Association and the State Engineer shall jointly move the Court to dismiss the Petition with prejudice and, pursuant to 19.27.5.11(E)(1) NMAC, approve this Agreement and enter a Final Decree that incorporates by reference this Agreement and retains jurisdiction over the Parties to interpret and enforce the terms, provisions, and conditions hereof. Upon the Court's granting said motion, the Petition shall be dismissed.

8. Nothing in this Agreement shall be construed to prohibit or restrict the Association from acquiring, transferring or using other water rights that are not subject to this Agreement in the manner provided by applicable law and regulation.

9. The Parties represent and warrant that each party has the full right, power and authority to enter into this Agreement and to bind said party to the terms, provisions and conditions hereof, and that the person executing this Agreement on behalf of each party has been duly authorized to enter into this Agreement.

10. This Agreement shall be binding upon, enforceable by and inure to the benefit of the Parties hereto and their respective successors and assigns.

11. This Agreement constitutes the entire agreement between the Parties respecting the subject matter hereof. All prior agreements between the Parties and all negotiations concerning the subject matter of this Agreement are merged herein. There are no other agreements, oral or written, between the Parties respecting the subject matter hereof. No modification or amendment of this Agreement shall be valid or enforceable unless in writing and signed by the duly authorized representative of each Party.

[Remainder of Page Intentionally Left Blank]

WHEREFORE, the Parties have executed this Agreement as of the last date provided below.

VISTA REDONDA WATER AND PROPERTY OWNERS' ASSOCIATION, INC.

BY Susan G. Mize

ITS President

Dated: April 15, 2013

NEW MEXICO STATE ENGINEER.

By: _____

Dated: _____

WHEREFORE, the Parties have executed this Agreement as of the last date provided below.

VISTA REDONDA WATER AND PROPERTY OWNERS' ASSOCIATION, INC.

BY_____

ITS_____

Dated:_____

NEW MEXICO STATE ENGINEER.

By: Scott A. Verhines

Dated: 4-15-13

Appendix D.5

RG-94437

Scott A. Verhines, P.E.
State Engineer

Santa Fe Office
PO BOX 25102
SANTA FE, NM 87504-5102

Trn Nbr: 538998
File Nbr: RG 94437

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Jan. 09, 2014

DAVID RULE, PRESIDENT
VISTA REDONDA WATER & PROPERTY OWNERS' ASSC., INC.
P.O. BOX 375
TESUQUE, NM 87574

Greetings:

Enclosed is your copy of the above numbered permit that has been approved in accordance with NM Statute Section 72-12-1 subject to the conditions set forth on the approval page.

As per Specific Condition 8: Use shall be limited strictly to household and/or drinking and sanitary purposes; water shall be conveyed from the well to the place of use in a closed conduit and the effluent returned to the underground so that it will not appear on the surface. No irrigation of lawns, gardens, trees or use in any type of pool or pond is authorized under this permit.

AND,

As per Condition C, a Well Record & Log (OSE Form wr-21) shall be filed in this office within twenty (20) days after completion of drilling, but no later than 01/01/2031. Your rights under this permit shall expire if this submission is not made by the date indicated.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us or will be mailed upon request.

Sincerely,

Rico Blea
(505)827-6120

Encls: Approved Permit

cond8

File No. RG-94437

6-37076

NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO USE UNDERGROUND WATERS IN ACCORDANCE WITH SECTIONS 72-12-1.1, 72-12-1.2, OR 72-12-1.3 NEW MEXICO STATUTES

For fees, see State Engineer website: http://www.ose.state.nm.us/

1. APPLICANT(S)

Name: **Vista Redonda Water & Property Owners' Association, Inc.**	
Contact or Agent: ☐ **David Rule, President**	Contact or Agent: check here if Agent ☐
Mailing Address: **P.O. Box 375**	Mailing Address:
City: **Tesuque**	City:
State: **New Mexico** Zip Code: **87574**	State: Zip Code:
Phone: **281-757-5565** ☐ Home ☒ Cell Phone (Work): **505-982-2832**	Phone: ☐ Home ☐ Cell Phone (Work):
E-mail (optional):	E-mail (optional):

2. WELL LOCATION **Required: Coordinate location must be New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84). District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.**

NM State Plane (NAD83) - In feet	NM West Zone ☐ NM Central Zone ☐ NM East Zone ☐	X (in feet): Y (in feet):		
UTM (NAD83) - In meters	UTM Zone 13N ☐ UTM Zone 12N ☐	Easting (in meters): Northing (in meters):		
Lat/Long (WGS84) - To 1/10th of second	Latitude:	**35** deg	**48** min	**27.4** sec
	Longitude:	**105** deg	**54** min	**42.8** sec

Other Location Information (complete the below, if applicable):

PLSS Quarters or Halves: Section: Township: Range:

County:

Land Grant Name (if applicable):

Lot No: Block No: Unit/Tract: Subdivision:

Hydrographic Survey: Map: Tract:

Other description relating point of diversion to common landmarks, streets, or other:
within Infrastructure Capacity Area of the Vista Redonda Water & Property Owners' Association, Inc., inside the boundaries of storage tank site at intersection of NM 592 and SH 76B

Point of Diversion is on Land Owned by (Required): Vista Redonda Mutual Domestic Water Consumers Association

2014 JAN -9 PM 2:55

OFFICE OF STATE ENGINEER SANTA FE, NEW MEXICO

FOR OSE INTERNAL USE

Application for Permit, Form wr-01, Rev 3/8/12

File Number: RG-94437		Trn Number: 538498
Sub-basin:	POD No.	Log Due Date:

3. PURPOSE OF USE

- ☐ Domestic use for one household
- ☐ Drinking and sanitary uses that are incidental to the operations of a governmental, commercial, or non-profit facility
- ☐ Prospecting, mining or drilling operations to discover or develop natural resources
- ☐ Construction of public works, highways and roads Domestic
- ☐ use for one household and livestock watering Domestic use
- ☒ for multiple households **(MDWCA use)**
- ☐ Domestic well to accompany a house or other dwelling unit constructed for sale

4. WELL INFORMATION

File Information: (If existing well, provide OSE no. & indicate below if well is to be replacement, repaired or deepened, or supplemental. If new well, leave blank, as OSE must assign no.)

OSE Well No.(If Existing)	New Well No. (provided by OSE)
Driller Name: not yet contracted	**Driller License Number:**
Approximate Depth of Well (feet): **900**	Outside Diameter of Well Casing (inches): **6 5/8**

☐ Replacement well (List all existing wells if more than one):	☐ Repair or Deepen: ☐ Clean out well to original depth ☐ Deepen well from _____to _____ft. ☐ Other (Explain):	☐ Supplemental well (List OSE No. for all wells this will supplement):

5. ADDITIONAL STATEMENTS OR EXPLANATIONS

Applicant requests to drill a new well within the Infrastructure Capacity Area of the Vista Redonda Water & Property Owners' Association, Inc. (Vista Redonda), and divert 3 acre-feet per year from said new well for MDWCA use, under this application, per Water Rights Settlement Agreement (Settlement Agreement) made and entered into May 16, 2013, by and between Vista Redonda and the New Mexico State Engineer. Under the Settlement Agreement, Vista Redonda has until January 1, 2030, to drill the new well.

ACKNOWLEDGEMENT

I, We (name of applicant(s)), **Vista Redonda Water & Property Owners' Association, Inc.**
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

D. M. Rule

David Rule, President, Vista Redonda Water & Property Owners' Association, Inc.
Applicant Signature

ACTION OF THE STATE ENGINEER (FOR OSE USE ONLY)

This application is approved subject to the attached general and specific conditions of approval.

Witness my hand and seal this _____day of _____ 20 _____, for the State Engineer,

By: _____ _____
Signature Print

FOR OSE INTERNAL USE — Application for Permit, Form wr-01, Rev 3/8/12

File Number: RG- 94437		Trn Number: 538998
Sub-basin:	POD No.	Log Due Date:

NEW MEXICO STATE ENGINEER OFFICE
APPLICATION FOR PERMIT TO USE UNDERGROUND WATERS
IN ACCORDANCE WITH SECTION 72-12-1 NEW MEXICO STATUTES

GENERAL CONDITIONS OF APPROVAL (A thru P)

06-A The maximum amount of water that may be appropriated under this permit is 3.000 acre-feet in any year.

06-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated. A licensed driller shall not be required for the construction of a driven well; provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter (Section 72-12-12).

06-C Driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.

06-D The casing shall not exceed 7 inches outside diameter except under specific conditions in which reasons satisfactory to the State Engineer are shown.

06-E To request a change to the use of water authorized under this permit, the permittee shall file an application with the State Engineer.

06-F An application for a new 72-12-1.1 domestic well permit where the proposed point of diversion is to be located on the same legal lot of record as an operational 72-12-1.1 domestic well shall be treated as an application for a supplemental well.

06-G If artesian water is encountered, all rules and regulations pertaining to the drilling and casing of artesian wells shall be complied with.

06-H The drilling of the well and amount and uses of water permitted are subject to such limitations as may be imposed by a court or by lawful municipal or county ordinance which are more restrictive than the conditions of this permit and applicable State Engineer regulations.

06-I The permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

NEW MEXICO STATE ENGINEER OFFICE
APPLICATION FOR PERMIT TO USE UNDERGROUND WATERS
IN ACCORDANCE WITH SECTION 72-12-1 NEW MEXICO STATUTES

GENERAL CONDITIONS OF APPROVAL (Continued)

06-J The well shall be set back a minimum of 50 ft. from an existing well of other ownership unless a variance has been granted by the State Engineer. The State Engineer may grant a variance for a replacement well or to allow for maximum spacing of the well from a source of groundwater contamination. The well shall be set back from potential sources of contamination in accordance with rules and regulations of the NM Environment Department.

06-K Pursuant to section 72-8-1 NMSA, the permittee shall allow the State Engineer and his representatives entry upon private property for the performance of their respective duties, including access to the well for meter reading and water level measurement.

06-L The permit is subject to cancellation for non-compliance with the conditions of approval or if otherwise not exercised in accordance with the terms of the permit.

06-M The right to divert water under this permit is subject to curtailment by priority administration as implemented by the State Engineer or a court.

06-N In the event of any change of ownership to this permit the new owner shall file a change of ownership form with the State Engineer in accordance with Section 72-1-2.1 NMSA.

06-O ~~This well permit shall automatically expire unless the well is completed and the well record is filed with the State Engineer within one year of the date of issuance of the permit. It is the responsibility of the permit holder to ensure that the well record has been properly filed with the State Engineer.~~ As per Settlement Agreement. Steve Mastovich

06-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between geologic zones.

06-Q The State Engineer retains jurisdiction over this permit.

SPECIFIC CONDITIONS OF APPROVAL

06-5B A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water;

NEW MEXICO STATE ENGINEER OFFICE
APPLICATION FOR PERMIT TO USE UNDERGROUND WATERS
IN ACCORDANCE WITH SECTION 72-12-1 NEW MEXICO STATUTES

pumping records shall be submitted to the District Supervisor on or before the 10th of Jan., April, July and Oct. of each year for the 3 preceding calendar months.

06-8 Water diverted under this permit is restricted to indoor household, drinking and sanitary purposes only. Water shall be conveyed from the well to the place of use in closed conduit and the effluent returned to the underground so that it will not appear on the surface. No irrigation of lawns, gardens, trees or use in any type of pool, pond or livestock watering is authorized under this permit.

LOG This permit will automatically expire unless the well RG 94437 POD1 is completed and the well record filed on or before 01/01/2031.

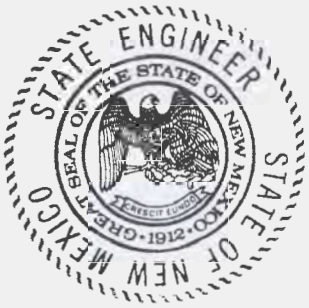
ACTION OF STATE ENGINEER

This application is approved for the use indicated, subject to all general conditions and to specific conditions listed above.

Witness my hand and seal this 09 day of Jan A.D., 2014

Scott A. Verhines, P.E., State Engineer

By: Rico Blea
Rico Blea



Trn Desc: RG 94437 File Number: RG 94437
Log Due Date: 01/01/2031 Trn Number: 538998
Form: wr-01 page: 3

Locator Tool Report

General Information:

Application ID: 29 Date: 01-09-2014 Time: 14:38:38

WR File Number: RG 44437
Purpose: POINT OF DIVERSION

Applicant First Name: VISTA REDONDA WATER & PROPERTY OWNERS ASSOCIATION,
Applicant Last Name: INC.

GW Basin: RIO GRANDE
County: SANTA FE

Critical Management Area Name(s): WATERS USE ONLY: SUBBASIN - NRG
WATERS USE ONLY: SUBBASIN - NPT
Special Condition Area Name(s): NPT DOMESTIC WELL STIPULATION
Land Grant Name: NON GRANT

PLSS Description (New Mexico Principal Meridian):

SE 1/4 of NE 1/4 of SE 1/4 of NE 1/4 of Section 07, Township 18N, Range 10E.

Coordinate System Details:

Geographic Coordinates:

Latitude:	35 Degrees	48 Minutes	27.4 Seconds	N
Longitude:	105 Degrees	54 Minutes	42.8 Seconds	W

Universal Transverse Mercator Zone: 13N

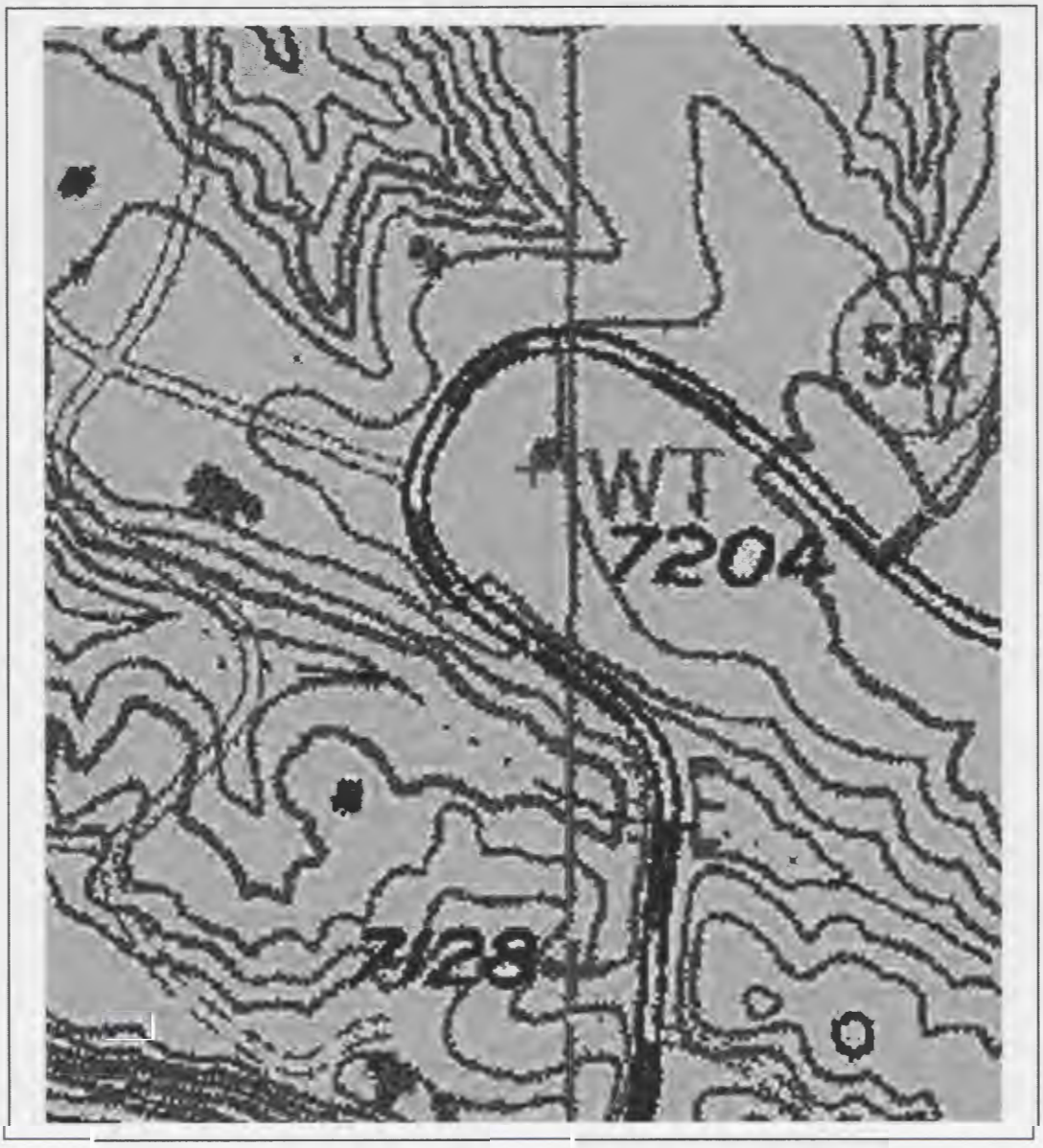
NAD 1983(92) (Meters)	N: 3,962,994	E: 417,613
NAD 1983(92) (Survey Feet)	N: 13,001,922	E: 1,370,120
NAD 1927 (Meters)	N: 3,962,790	E: 417,663
NAD 1927 (Survey Feet)	N: 13,001,254	E: 1,370,284

State Plane Coordinate System Zone: New Mexico Central

NAD 1983(92) (Meters)	N: 533,221	E: 530,556
NAD 1983(92) (Survey Feet)	N: 1,749,409	E: 1,740,667
NAD 1927 (Meters)	N: 533,202	E: 183,009
NAD 1927 (Survey Feet)	N: 1,749,347	E: 600,423

NEW MEXICO OFFICE OF STATE ENGINEER

Locator Tool Report



WR File Number: RG Scale: 1:4,319

Northing/Easting: UTM83(92) (Meter): N: 3,962,994 E: 417,613

Northing/Easting: SPCS83(92) (Feet): N: 1,749,409 E: 1,740,367

GW Basin: Rio Grande

Print Date: 01/09/2014

Appendix D.6

RG-94436

Scott A. Verhines, P.E.
State Engineer

Santa Fe Office
PO BOX 25102
SANTA FE, NM 87504-5102

Trn Nbr: 538997
File Nbr: RG 94436

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Jan. 09, 2014

DAVID RULE, PRESIDENT
VISTA REDONDA WATER & PROPERTY OWNERS' ASSC., INC.
P.O. BOX 375
TESUQUE, NM 87574

Greetings:

Enclosed is your copy of the above numbered permit that has been approved in accordance with NM Statute Section 72-12-1 subject to the conditions set forth on the approval page.

As per Specific Condition 8: Use shall be limited strictly to household and/or drinking and sanitary purposes; water shall be conveyed from the well to the place of use in a closed conduit and the effluent returned to the underground so that it will not appear on the surface. No irrigation of lawns, gardens, trees or use in any type of pool or pond is authorized under this permit.

AND,

As per Condition C, a Well Record & Log (OSE Form wr-21) shall be filed in this office within twenty (20) days after completion of drilling, but no later than 01/01/2031. Your rights under this permit shall expire if this submission is not made by the date indicated.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us or will be mailed upon request.

Sincerely,

Rico Blea

Rico Blea
(505)827-6120

Encls: Approved Permit

cond8

File No. RG- 94436

6-37076

NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO USE UNDERGROUND WATERS IN ACCORDANCE WITH SECTIONS 72-12-1.1, 72-12-1.2, OR 72-12-1.3 NEW MEXICO STATUTES

For fees, see State Engineer website: http://www.ose.state.nm.us/

1. APPLICANT(S)

Name: **Vista Redonda Water & Property Owners' Association, Inc.**	
Contact or Agent: ☐ **David Rule, President**	Contact or Agent: check here if Agent ☐
Mailing Address: **P.O. Box 375**	Mailing Address:
City: **Tesuque**	City:
State: **New Mexico** Zip Code: **87574**	State: Zip Code:
Phone: **281-757-5565** ☐ Home ☒ Cell Phone (Work): **505-982-2832**	Phone: ☐ Home ☐ Cell Phone (Work):
E-mail (optional):	E-mail (optional):

2. WELL LOCATION Required: Coordinate location must be New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84). District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

NM State Plane (NAD83) - In feet	NM West Zone ☐ NM Central Zone ☐ NM East Zone ☐	X (in feet): Y (in feet):		
UTM (NAD83) - In meters	UTM Zone 13N ☐ UTM Zone 12N ☐	Easting (in meters): Northing (in meters):		
Lat/Long (WGS84) - To 1/10th of second	Latitude:	**35** deg	**48** min	**48.7** sec
	Longitude:	**105** deg	**55** min	**30.7** sec

Other Location Information (complete the below, if applicable):

PLSS Quarters or Halves: Section: Township: Range:

County:

Land Grant Name (if applicable):

Lot No: Block No: Unit/Tract: Subdivision:

Hydrographic Survey: Map: Tract:

Other description relating point of diversion to common landmarks, streets, or other:
within Infrastructure Capacity Area of the Vista Redonda Water & Property Owners' Association, Inc., inside the boundaries of property located at 111 Paseo Encantado SW

Point of Diversion is on Land Owned by (Required): B.T. Basham

FOR OSE INTERNAL USE

Application for Permit, Form wr-01, Rev 3/8/12

File Number: RG- 94436		Trn Number: S38 997
Sub-basin:	POD No.	Log Due Date:

3. PURPOSE OF USE

- ☐ Domestic use for one household
- ☐ Drinking and sanitary uses that are incidental to the operations of a governmental, commercial, or non-profit facility
- ☐ Prospecting, mining or drilling operations to discover or develop natural resources
- ☐ Construction of public works, highways and roads Domestic
- ☐ use for one household and livestock watering Domestic use
- ☒ for multiple households **(MDWCA use)**
- ☐ Domestic well to accompany a house or other dwelling unit constructed for sale

4. WELL INFORMATION

File Information: (If existing well, provide OSE no. & indicate below if well is to be replacement, repaired or deepened, or supplemental. If new well, leave blank, as OSE must assign no.)

OSE Well No.(If Existing)	New Well No. (provided by OSE)
Driller Name: not yet contracted	**Driller License Number:**
Approximate Depth of Well (feet): **900**	Outside Diameter of Well Casing (inches): **6 5/8**

☐ Replacement well (List all existing wells if more than one):	☐ Repair or Deepen: ☐ Clean out well to original depth ☐ Deepen well from _____to _____ft. ☐ Other (Explain):	☐ Supplemental well (List OSE No. for all wells this will supplement):

5. ADDITIONAL STATEMENTS OR EXPLANATIONS

Applicant requests to drill a new well within the Infrastructure Capacity Area of the Vista Redonda Water & Property Owners' Association, Inc. (Vista Redonda), and divert 3 acre-feet per year from said new well for MDWCA use, under this application, per Water Rights Settlement Agreement (Settlement Agreement) made and entered into May 16, 2013, by and between Vista Redonda and the New Mexico State Engineer. Under the Settlement Agreement, Vista Redonda has until January 1, 2030, to drill the new well.

ACKNOWLEDGEMENT

I, We (name of applicant(s)), **Vista Redonda Water & Property Owners' Association, Inc.**
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

D. M. Rule

David Rule, President, Vista Redonda Water & Property Owners' Association, Inc.
Applicant Signature

ACTION OF THE STATE ENGINEER (FOR OSE USE ONLY)

This application is approved subject to the attached general and specific conditions of approval.

Witness my hand and seal this _____day of _____ 20 _____, for the State Engineer,

By: _____ _____
Signature Print

FOR OSE INTERNAL USE — Application for Permit, Form wr-01, Rev 3/8/12

File Number: RG- 94436		Trn Number: 538997
Sub-basin:	POD No.	Log Due Date:

NEW MEXICO STATE ENGINEER OFFICE
APPLICATION FOR PERMIT TO USE UNDERGROUND WATERS
IN ACCORDANCE WITH SECTION 72-12-1 NEW MEXICO STATUTES

GENERAL CONDITIONS OF APPROVAL (A thru P)

06-A The maximum amount of water that may be appropriated under this permit is 3.000 acre-feet in any year.

06-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated. A licensed driller shall not be required for the construction of a driven well; provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter (Section 72-12-12).

06-C Driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.

06-D The casing shall not exceed 7 inches outside diameter except under specific conditions in which reasons satisfactory to the State Engineer are shown.

06-E To request a change to the use of water authorized under this permit, the permittee shall file an application with the State Engineer.

06-F An application for a new 72-12-1.1 domestic well permit where the proposed point of diversion is to be located on the same legal lot of record as an operational 72-12-1.1 domestic well shall be treated as an application for a supplemental well.

06-G If artesian water is encountered, all rules and regulations pertaining to the drilling and casing of artesian wells shall be complied with.

06-H The drilling of the well and amount and uses of water permitted are subject to such limitations as may be imposed by a court or by lawful municipal or county ordinance which are more restrictive than the conditions of this permit and applicable State Engineer regulations.

06-I The permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

NEW MEXICO STATE ENGINEER OFFICE
APPLICATION FOR PERMIT TO USE UNDERGROUND WATERS
IN ACCORDANCE WITH SECTION 72-12-1 NEW MEXICO STATUTES

GENERAL CONDITIONS OF APPROVAL (Continued)

06-J The well shall be set back a minimum of 50 ft. from an existing well of other ownership unless a variance has been granted by the State Engineer. The State Engineer may grant a variance for a replacement well or to allow for maximum spacing of the well from a source of groundwater contamination. The well shall be set back from potential sources of contamination in accordance with rules and regulations of the NM Environment Department.

06-K Pursuant to section 72-8-1 NMSA, the permittee shall allow the State Engineer and his representatives entry upon private property for the performance of their respective duties, including access to the well for meter reading and water level measurement.

06-L The permit is subject to cancellation for non-compliance with the conditions of approval or if otherwise not exercised in accordance with the terms of the permit.

06-M The right to divert water under this permit is subject to curtailment by priority administration as implemented by the State Engineer or a court.

06-N In the event of any change of ownership to this permit the new owner shall file a change of ownership form with the State Engineer in accordance with Section 72-1-2.1 NMSA.

06-O This well permit shall automatically expire unless the well is completed and the well record is filed with the State Engineer within one year of the date of issuance of the permit. It is the responsibility of the permit holder to ensure that the well record has been properly filed with the State Engineer.

06-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between geologic zones.

06-Q The State Engineer retains jurisdiction over this permit.

SPECIFIC CONDITIONS OF APPROVAL

06-5B A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water;

pumping records shall be submitted to the District Supervisor on or before the 10th of Jan., April, July and Oct. of each year for the 3 preceding calendar months.

06-8 Water diverted under this permit is restricted to indoor household, drinking and sanitary purposes only. Water shall be conveyed from the well to the place of use in closed conduit and the effluent returned to the underground so that it will not appear on the surface. No irrigation of lawns, gardens, trees or use in any type of pool, pond or livestock watering is authorized under this permit.

LOG This permit will automatically expire unless the well RG 94436 POD1 is completed and the well record filed on or before 01/01/2031.

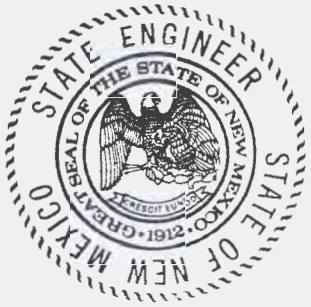
ACTION OF STATE ENGINEER

This application is approved for the use indicated, subject to all general conditions and to specific conditions listed above.

Witness my hand and seal this 09 day of Jan A.D., 2014

Scott A. Verhines, P.E., State Engineer

By: Rico Blea
Rico Blea



Locator Tool Report

General Information:

Application ID: 29 Date: 01-09-2014 Time: 14:34:34

WR File Number: RG 94436
Purpose: POINT OF DIVERSION

Applicant First Name: VISTA REDONDA WATER & PROPERTY OWNERS ASSOCIATION,
Applicant Last Name: INC.

GW Basin: RIO GRANDE
County: SANTA FE

Critical Management Area Name(s): WATERS USE ONLY: SUBBASIN - NRG
WATERS USE ONLY: SUBBASIN - NPT
Special Condition Area Name(s): NPT DOMESTIC WELL STIPULATION
Land Grant Name: NON GRANT

PLSS Description (New Mexico Principal Meridian):

NE 1/4 of SE 1/4 of SW 1/4 of SW 1/4 of Section 06, Township 18N, Range 10E.

Coordinate System Details:

Geographic Coordinates:

Latitude:	35 Degrees	48 Minutes	48.7 Seconds	N
Longitude:	105 Degrees	55 Minutes	30.7 Seconds	W

Universal Transverse Mercator Zone: 13N

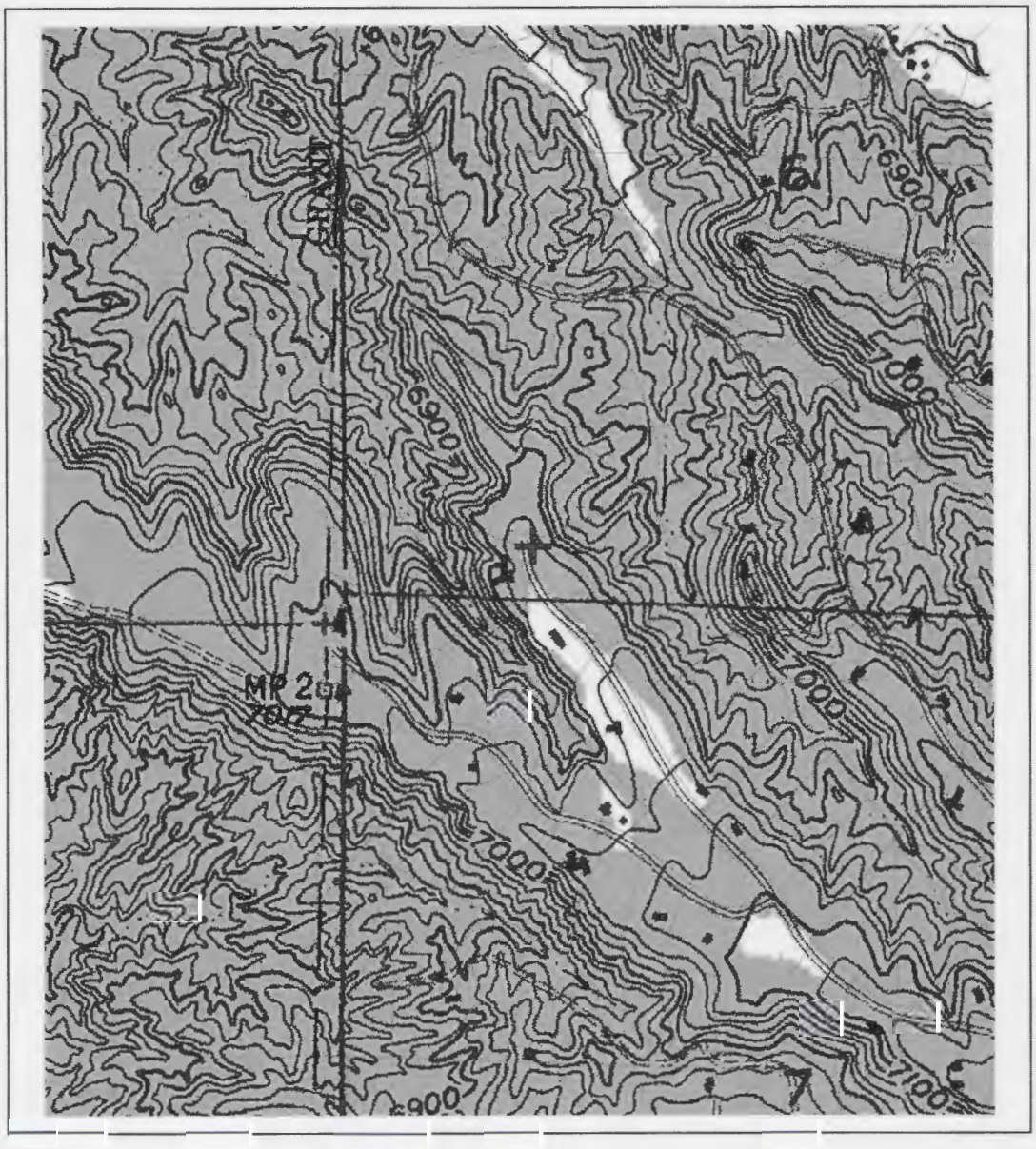
NAD 1983(92) (Meters)	N: 3,963,661	E: 416,417
NAD 1983(92) (Survey Feet)	N: 13,004,112	E: 1,366,196
NAD 1927 (Meters)	N: 3,963,458	E: 416,468
NAD 1927 (Survey Feet)	N: 13,003,444	E: 1,366,360

State Plane Coordinate System Zone: New Mexico Central

NAD 1983(92) (Meters)	N: 533,873	E: 529,352
NAD 1983(92) (Survey Feet)	N: 1,751,549	E: 1,736,714
NAD 1927 (Meters)	N: 533,854	E: 181,805
NAD 1927 (Survey Feet)	N: 1,751,487	E: 596,471

NEW MEXICO OFFICE OF STATE ENGINEER

Locator Tool Report



WR File Number: RG Scale: 1:12,455

Northing/Easting: UTM83(92) (Meter): N: 3,963,661 E: 416,417

Northing/Easting: SPCS83(92) (Feet): N: 1,751,549 E: 1,736,714

GW Basin: Rio Grande

Print Date: 01/09/2014

Appendix D.7

RG-95071

File: RG-95071

NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO USE UNDERGROUND WATERS IN ACCORDANCE WITH SECTIONS 72-12-1.1, 72-12-1.2, OR 72-12-1.3 NEW MEXICO STATUTES

For fees, see State Engineer website: http://www.ose.state.nm.us/

1. APPLICANT(S)

Name: **Vista Redonda Water & Property Owners' Association, Inc.**	
Contact or Agent: ☐ **David Rule, President**	Contact or Agent: check here if Agent ☐
Mailing Address: **P.O. Box 375**	Mailing Address:
City: **Tesuque**	City:
State: **New Mexico** Zip Code: **87574**	State: Zip Code:
Phone: **281-757-5565** ☐ Home ☒ Cell Phone (Work): **505-982-2832**	Phone: ☐ Home ☐ Cell Phone (Work):
E-mail (optional):	E-mail (optional):

2. WELL LOCATION Required: Coordinate location must be New Mexico State Plane (NAD 83), UTM (NAD 83), <u>or</u> Lat/Long (WGS84). District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

NM State Plane (NAD83) - In feet	NM West Zone ☐ NM Central Zone ☐ NM East Zone ☐	X (in feet): Y (in feet):	
UTM (NAD83) - In meters	UTM Zone 13N ☐ UTM Zone 12N ☐	Easting (in meters): Northing (in meters):	
Lat/Long (WGS84) - To 1/10th of second	Latitude: **35** deg	**48** min	**36.3** sec
	Longitude: **105** deg	**55** min	**21.0** sec

Other Location Information (complete the below, if applicable):			
PLSS Quarters or Halves:	Section:	Township:	Range:
County:			
Land Grant Name (if applicable):			
Lot No: Block No:	Unit/Tract:	Subdivision:	
Hydrographic Survey:		Map:	Tract:
Other description relating point of diversion to common landmarks, streets, or other: RG - 19903 aka "Well 6"			
Point of Diversion is on Land Owned by (Required): Vista Redonda Water & Property Owners' Association, Inc.			

2013 DEC 18 AM 10: 51

FOR OSE INTERNAL USE

Application for Permit, Form wr-01, Rev 3/8/12

File Number: RG-95071		Trn Number:
Sub-basin: N-P-T	POD No. RG-19903	Log Due Date: N/A

3. PURPOSE OF USE

- ☐ Domestic use for one household
- ☐ Drinking and sanitary uses that are incidental to the operations of a governmental, commercial, or non-profit facility
- ☐ Prospecting, mining or drilling operations to discover or develop natural resources
- ☐ Construction of public works, highways and roads Domestic
- ☐ use for one household and livestock watering Domestic use
- ☒ for multiple households **(MDWCA use)**
- ☐ Domestic well to accompany a house or other dwelling unit constructed for sale

4. WELL INFORMATION

File Information: (If existing well, provide OSE no. & indicate below if well is to be replacement, repaired or deepened, or supplemental. If new well, leave blank, as OSE must assign no.)

OSE Well No.(If Existing) **RG-19903**	New Well No. (provided by OSE)
Driller Name: G & H Drilling	**Driller License Number: 815**
Approximate Depth of Well (feet): **905**	Outside Diameter of Well Casing (inches): **5 9/16**

☐ Replacement well (List all existing wells if more than one):	☐ Repair or Deepen: ☐ Clean out well to original depth ☐ Deepen well from _____to _____ft. ☐ Other (Explain):	☐ Supplemental well (List OSE No. for all wells this will supplement):

5. ADDITIONAL STATEMENTS OR EXPLANATIONS

Applicant requests to divert 3 acre-feet per year from RG-19903 for MDWCA use under this application, per Water Rights Settlement Agreement made and entered into May 16, 2013, by and between Vista Redonda Water & Property Owners' Association, Inc. and the New Mexico State Engineer

ACKNOWLEDGEMENT

I, We (name of applicant(s)), **Vista Redonda Water & Property Owners' Association, Inc.**
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

D. R. Rule

David Rule, President, Vista Redonda Water & Property Owners' Association, Inc.
Applicant Signature

ACTION OF THE STATE ENGINEER (FOR OSE USE ONLY)

This application is approved subject to the attached general and specific conditions of approval.

Witness my hand and seal this 16th day of December 2014, for the State Engineer,

By: Stephen D. Mastovich
Signature

STEPHEN D. MASTOVICH
Print

FOR OSE INTERNAL USE — Application for Permit, Form wr-01, Rev 3/8/12

File Number: R6-95071		Trn Number:
Sub-basin: N-P-T	POD No. R6-19903	Log Due Date: N/A

CONDITIONS OF APPROVAL

1. **Permit No.:** RG-95071

   Permittee: Vista Redonda Water & Property Owners Association, Inc.

   Source: Ground Water of the Rio Grande Underground Water Basin

   Priority: RG-95071 - 2014
   RG-19903 - 1971

   Point of Diversion: Well RG-19903 located at Latitude 35 degrees, 48 minutes, 36.3 seconds North and Longitude 105 degrees, 55 minutes, 21.0 seconds West, is the point of diversion for well RG-95071

   Purpose of Use: Domestic; associated with a mutual domestic water consumers association

   Place of Use: RG-95071 and RG-19903: the area shown in the Vista Redonda Water & Property Owners Association, Inc. Infrastructure Capacity Area Map

   Amount of Water: The maximum amount of water diverted from well RG-19903, under this Permit originating with the Water Rights Settlement, shall not exceed 3.0 acre-feet per annum.

2. Within 30 days of the issuance of this permit, well RG-19903 shall be equipped with a functioning totalizing meter acceptable to the Office of the State Engineer. Said meter shall be installed at the well head, or as near as possible.

3. Within 30 days of the issuance of this permit, the permittee shall notify the Office of the State Engineer in writing of the make, model, serial number, the initial reading, and the date of installation of the totalizing meters described above in condition number two.

4. Records of the amount of water diverted from well RG-19903 shall be submitted in writing to the Office of the State Engineer quarterly, on or before the 10th day of April, July, October, and January.

5. The permittee shall utilize the highest technology available, to the maximum extent economically practical, to insure conservation of water.

6. A Water Development Plan Pursuant to Section 72-1-9 N.M.S.A. shall be filed prior to December 16th, 2015.

7. Proof of Application of Water to Beneficial Use shall be filed prior to December 16th, 2054.

Witness my hand and seal this 16th day of December 2014

TOM BLAINE, P.E.
NEW MEXICO STATE ENGINEER

By: _____
Stephen D. Mastovich, P.G.
Nambe-Pojoaque-Tesuque Water Master
Water Rights Division

Appendix D.8

RG-95072 & RG-95073

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
District 6 Office, Santa Fe, NM

Tom Blaine, P.E.
State Engineer

P. O. Box 25102
Santa Fe, New Mexico 87504-5102
(505) 827-6120
FAX: (505) 827-6682

December 16, 2014

Vista Redonda Water & Property Owners' Association, Inc.
P.O. Box 375
Tesuque New Mexico 87574

Certified Mail
Return Receipt

Re: RG-95072 and RG-95073
Permit to Use Underground Waters

Greetings:

Enclosed please find the referenced Application for Permit to Use Underground Waters that has been approved, subject to all Conditions of Approval attached thereto.

If you are aggrieved by this decision, you should so advise this office in writing before the expiration of thirty (30) days after receipt of this letter and request that the previous actions of the State Engineer be set aside and that a date for hearing be set by the State Engineer. Requests for hearing may be filed by facsimile, provided the original request is mailed and postmarked within 24 hours of the facsimile. The applicant must indicate the date and time of transmission of the facsimile and also provide a cover letter confirming that the original will be mailed within 24 hours. If you have any question regarding this matter, do not hesitate to contact me.

Sincerely,
Water Rights Division

Stephen D. Mastovich
Water Master

Enclosures: Permit to Use Underground Waters
Conditions of Approval

File No. RG-95073

NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO USE UNDERGROUND WATERS IN ACCORDANCE WITH SECTIONS 72-12-1.1, 72-12-1.2, OR 72-12-1.3 NEW MEXICO STATUTES

For fees, see State Engineer website: http://www.ose.state.nm.us/

1. APPLICANT(S)

Name: **Vista Redonda Water & Property Owners' Association, Inc.**	
Contact or Agent: ☐ **David Rule, President**	Contact or Agent: check here if Agent ☐
Mailing Address: **P.O. Box 375**	Mailing Address:
City: **Tesuque**	City:
State: **New Mexico** Zip Code: **87574**	State: Zip Code:
Phone: **281-757-5565** ☐ Home ☒ Cell Phone (Work): **505-982-2832**	Phone: ☐ Home ☐ Cell Phone (Work):
E-mail (optional):	E-mail (optional):

2. WELL LOCATION

NM State Plane (NAD83) - In feet	NM West Zone ☐ NM Central Zone ☐ NM East Zone ☐	X (in feet): Y (in feet):		
UTM (NAD83) - In meters	UTM Zone 13N ☐ UTM Zone 12N ☐	Easting (in meters): Northing (in meters):		
Lat/Long (WGS84) - To 1/10th of second	Latitude:	**35** deg	**49** min	**11.5** sec
	Longitude:	**105** deg	**55** min	**17.4** sec

Other Location Information (complete the below, if applicable):

PLSS Quarters or Halves: Section: Township: Range:

County:

Land Grant Name (if applicable):

Lot No: Block No: Unit/Tract: Subdivision:

Hydrographic Survey: Map: Tract:

Other description relating point of diversion to common landmarks, streets, or other:

RG-21573A aka "Well 7"

Point of Diversion is on Land Owned by (Required): Christian Van Schayk

FOR OSE INTERNAL USE — Application for Permit, Form wr-01, Rev 3/8/12

File Number: RG-95073	Trn Number:	
Sub-basin: N-P-T	POD No. RG-21573-A	Log Due Date: N/A

3. PURPOSE OF USE

- ☐ Domestic use for one household
- ☐ Drinking and sanitary uses that are incidental to the operations of a governmental, commercial, or non-profit facility
- ☐ Prospecting, mining or drilling operations to discover or develop natural resources
- ☐ Construction of public works, highways and roads Domestic
- ☐ use for one household and livestock watering Domestic use
- ☒ for multiple households **(MDWCA use)**
- ☐ Domestic well to accompany a house or other dwelling unit constructed for sale

4. WELL INFORMATION

File Information: [illegible]

OSE Well No.(If Existing) **RG-21573A**	New Well No. (provided by OSE)
Driller Name: Caldwell Drilling	**Driller License Number: 1310**
Approximate Depth of Well (feet): **520**	Outside Diameter of Well Casing (inches): **6 5/8**

☐ Replacement well (List all existing wells if more than one):	☐ Repair or Deepen: ☐ Clean out well to original depth ☐ Deepen well from ____to ____ft. ☐ Other (Explain):	☐ Supplemental well (List OSE No. for all wells this will supplement):

5. ADDITIONAL STATEMENTS OR EXPLANATIONS

Applicant requests to divert 3 acre-feet per year from RG-21573A for MDWCA use under this application, per Water Rights Settlement Agreement made and entered into May 16, 2013, by and between Vista Redonda Water & Property Owners' Association, Inc. and the New Mexico State Engineer

ACKNOWLEDGEMENT

I, We (name of applicant(s)), **Vista Redonda Water & Property Owners' Association, Inc.**
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

D. D. Rule

David Rule, President, Vista Redonda Water & Property Owners' Association, Inc.
Applicant Signature

ACTION OF THE STATE ENGINEER (FOR OSE USE ONLY)

This application is approved subject to the attached general and specific conditions of approval.

Witness my hand and seal this 16th day of December 20 14, for the State Engineer,

By: Steph P. Mast — Stephen D. Mastovich, P.E.
Signature — Print

FOR OSE INTERNAL USE — Application for Permit, Form wr-01, Rev 3/8/12

File Number: RG-95073		Trn Number:
Sub-basin: N-P-T	POD No RG-21573-A	Log Due Date: N/A

CONDITIONS OF APPROVAL

1. **Permit No.:** RG-95072 and RG-95073

   Permittee: Vista Redonda Water & Property Owners Association, Inc.

   Source: Ground Water of the Rio Grande Underground Water Basin

   Priority: RG-95072 – 2014
   RG-95073 - 2014
   RG-21573-A - 2001

   Point of Diversion: Well RG-21573-A located at Latitude 35 degrees, 49 minutes, 11.5 seconds North and Longitude 105 degrees, 55 minutes, 17.4 seconds West, is the point of diversion for wells RG-95072 and RG-95073

   Purpose of Use: Domestic; associated with a mutual domestic water consumers association

   Place of Use: RG-95072, RG-95073, and RG-21573-A: the area shown in the Vista Redonda Water & Property Owners Association, Inc. Infrastructure Capacity Area Map

   Amount of Water: The maximum amount of water diverted from well RG-21573-A, under this Permit originating with the Water Rights Settlement, shall not exceed 6.0 acre-feet per annum. The maximum amount of water diverted from the domestic water right previously permitted to well RG-21573-A shall not exceed 3.0 acre-feet per annum. The **total** allowable diversion of water from well RG-21573-A shall not exceed **9.0 acre-feet per annum**.

2. Within 30 days of the issuance of this permit, well RG-21573-A shall be equipped with a functioning totalizing meter acceptable to the Office of the State Engineer. Said meter shall be installed at the well head, or as near as possible.

3. Within 30 days of the issuance of this permit, the permittee shall notify the Office of the State Engineer in writing of the make, model, serial number, the initial reading, and the date of installation of the totalizing meters described above in condition number two.

4. Records of the amount of water diverted from well RG-21573-A shall be submitted in writing to the Office of the State Engineer quarterly, on or before the 10th day of April, July, October, and January.

5. The permittee shall utilize the highest technology available, to the maximum extent economically practical, to insure conservation of water.

6. A Water Development Plan Pursuant to Section 72-1-9 N.M.S.A. shall be filed prior to December 16th, 2015.

7. Proof of Application of Water to Beneficial Use shall be filed prior to December 16th, 2054.

Witness my hand and seal this 16th day of December 2014

TOM BLAINE, P.E.
NEW MEXICO STATE ENGINEER

By: _____
Stephen D. Mastovich, P.G.
Nambe-Pojoaque-Tesuque Water Master
Water Rights Division

Appendix D.9

2013 Proof of Beneficial Use

File Number: _____
(For OSE Use Only)

NEW MEXICO OFFICE OF THE STATE ENGINEER
FINAL INSPECTION AND REPORT OF BENEFICIAL USE OF UNDERGROUND WATER

1. PERMITTEE

Name: Vista Redonda MDWCA Work Phone: _____
Contact: Susan Mize, President Home Phone: 505 988 7526
Address: P.O. Box 375
City: Tesuque State: NM Zip: 87574

2. TYPE OF PERMIT

Supplemental Wells to Change Point of Diversion, Place and Purpose of Use
(appropriate ground water, change place or purpose of use)

3. LOCATION OF WELL(S)

(If not already submitted, complete a Proof of Completion of well form for each new well drilled for this purpose.)

SEO Well No.	Subdivision	Section	Township	Range
RG-15616	NW ¼ NE ¼ NE ¼	7	18N	10E
RG-15928	SW ¼ SE ¼ NE ¼	7	18N	10E
RG-19903	NE ¼, NE ¼, NW ¼	7	18N	10E
RG-21573	SE ¼, SW ¼, NE ¼	7	18N	10E

4. DESCRIPTION OF BENEFICIAL USE

A. PURPOSE OF USE

Domestic: ___ Livestock: ___ Irrigation: ___ Municipal: ___ Industrial: ___
Commercial: ___ Other (specify): Subdivision, Domestic and Related
Specific use: Water for Vista Redonda MDWCA

B. QUANTITY

Diversion Amount: 8.08 acre-feet per annum
Consumptive Use: 4.04 acre-feet per annum
During the 12 month period from January 1, 2012 to January 1, 2013, water from the wells described above was applied to beneficial use on the place of use as described below:

Do Not Write Below This Line

File Number: _____ Trn Number: _____

File Number: _____
(For OSE Use Only)

NEW MEXICO OFFICE OF THE STATE ENGINEER
FINAL INSPECTION AND REPORT OF BENEFICIAL USE
OF UNDERGROUND WATER

4. DESCRIPTION OF BENEFICIAL USE- continued

C. PLACE OF USE

__640_____ acres of land described as follows:

Subdivision of Section (District or Hydrographic Survey)	Section (Map No.)	Township (Tract No.)	Range	Acres
Part	6	18N	10E	640
Part	7	18N	10E	

Who is the owner of the land? Various lot and home owners

5. ADDITIONAL STATEMENTS OR EXPLANATIONS:

During Calendar Year 2012, Vista Redonda MDWCA diverted a total of 20.21 acre-feet from well nos. RG-15616, RG-15928, RG-19903, and RG-21573 combined. This included the right to divert 3.0 acre-feet from each well, plus the additional 8.08 acre-feet per year allowed under the OSE Permit no. RG-15616 & RG-15928 et. Al., approved August 30, 2010. The total amount diverted from each well in acre-feet during 2012 is shown below:

RG-15616 - 4.30
RG-15928 - 3.70
RG-19903 - 6.42
RG-21573 - 5.79

A total of 20.21 acre-feet was diverted from the four wells during 2012, which is 0.6% over the permitted amount, within the meter accuracy. I recommend that the State Engineer accept the diversion of water from the four subject wells as fulfilling the requirement to place the permitted amount of water to beneficial use.

Do Not Write Below This Line

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
FINAL INSPECTION AND REPORT OF BENEFICIAL USE OF UNDERGROUND WATER

6. ENGINEER/SURVEYOR SIGNATURE:

I, Dennis R. Cooper, state that I am an engineer registered
(surveyor and/or engineer)

in the State of New Mexico, that I have made a complete examination of the beneficial use of water for Subdivision, domestic and related
(agriculture, industrial, commercial, municipal)

purposes described hereinefore and that my findings are contained in the above report.

This report is not accompanied by a survey of the project.
(is, is not)

Signed _____

Mailing Address 115 E. Alicante Rd.

City, State and Zip Santa Fe, NM 87505

License No. 6283 **(Engineer's/Surveyor's Seal)**

Date February 7, 2013

DENNIS R. COOPER NEW MEXICO 6283 REGISTERED PROFESSIONAL ENGINEER

ACKNOWLEDGEMENT

(I, We) On behalf of the Vista Rendanda Water & Property Owners' Association affirm that the
(Please Print)
foregoing statements are true to the best of (my, our) knowledge and belief.

Susan G. Mize
Permittee Signature

_____
Permittee Signature

Susan G. Mize
President

Do Not Write Below This Line

File Number: _____ Trn Number: _____

Appendix E.

NMOSE GPCD Calculator Spreadsheet

NMOSE GPCD CALCULATOR

Gallons per Capita - v2.05

Release Date: August 2015

This spreadsheet-based GPCD calculator is designed to help quantify and track water uses associated with water distribution systems. The spreadsheet contains several separate worksheets. Sheets can be accessed using the tabs towards the bottom of the screen, or by clicking the buttons on the left below. Descriptions of each sheet are also given below.

It should be noted that all the recorded data should be from actual metered results and should not include any estimates.

THE FOLLOWING KEY APPLIES THROUGHOUT:

- Value to be entered by user
- Dropdown box, pick from list
- Value calculated based on input data
- No longer available for input

Look for the following boxes that provide addition Instructions Info

Please begin by providing the following information, then proceed through each sheet:

NAME OF CITY OR UTILITY: Vista Redonda MDWCA — New Mexico

REPORTING YEARS: Enter the most recent reporting year: 2018 — Data can be entered back to: 2012

NAME OF CONTACT PERSON: Annie McCoy — **E-MAIL:** amccoy@shomaker.com — **TELEPHONE:** 505-345-3407 **Ext.**

SELECT THE REPORTING UNITS FOR VOLUME DATA: Gallons (US) — For unit converter click here: Converter

Instructions & Utility	This sheet
Census Data	Census data and the portal to get the data from the Census website
Single-Family	Single-Family residential gallons and population
Multi-Family	Multi-Family residential gallons and population
ICI & Other Metered	Other data including Commercial, Industrial and Institutional [1.3] and Other metered [1.4] categories
Reuse	Data related to water reuse projects
Total Diverted	Total Production and Diverted Water
Reported Data	The calculated data graphical review of most common performance indicators
Annual Performance	The calculated data graphical review of **annual** performance indicators
Monthly Performance	The calculated data graphical review of **monthly** performance indicators
Definitions	Use this sheet to understand terms used in the audit process

All parties reserve the right to validate the data recorded in this document. This does not bind the OSE or the Utility to the results. It is a tool used for planning purposes.

uestions or comments regarding the software please contact us at: waternm@state.nm.us

Census Information Data Table 2.1

Info

Click here to access the Census Web site

OR

Click here for instructions on how to find the data on the Census website

2018 TO 2012

Use the most recent census data

Return to Instructions

DATA

US Census Table	Description		INPUT
DP-1	**Profile of General Population and Housing Characteristics**	**Census Year**	**2018**
Subject			
Relationship	In group quarters	Total	**0**
Housing Occupancy	Total housing units	Total	**67**
	Occupied housing units		**67**
	Vacant housing units		
Households by Type	Average household size	Total	**2.27**

Formula: Household Size = Total Population / Total Number of Housing Units

Vacancy Rate %	

COMMENTS:

DATA INPUT SHEET

Vista Redonda MDWCA

Instructions

3. SINGLE-FAMILY RESIDENTIAL (SFR)

Return to Instructions

MONTHLY DATA

TABLE 3.1 Info

2018 TO 2012

SFR BILLED WATER CONSUMPTION (Gallons (US))

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018	224,830	187,770	279,170	744,880	1,313,490	1,278,720	1,655,370	1,203,800	966,170	631,890	274,630	243,360
2017	203,999	168,625	282,633	495,014	850,173	1,230,203	1,112,340	1,068,130	1,178,010	557,580	402,030	305,140
2016	139,919	193,379	297,209	424,954	1,032,611	1,212,262	1,407,829	690,433	998,180	625,909	251,380	435,199
2015	137,950	203,810	262,630	622,750	1,119,480	927,370	978,070	838,800	859,940	522,913	138,668	178,321
2014	224,490	184,230	281,040	657,110	734,560	1,002,830	1,027,550	947,320	898,100	554,550	258,850	237,090
2013												
2012												

TABLE 3.2 Info

Active Connections Only

You have chosen to enter Active Connections Only, enter the monthly values below, or enter annual values in table 3.8 Check message above Table 3.3 to see if additional data is required.

NUMBER OF SFR CONNECTIONS (Monthly)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018	67	67	67	67	67	67	67	67	67	67	67	67
2017	67	67	67	67	67	67	67	67	67	67	67	67
2016	66	66	66	66	66	67	67	67	67	67	67	67
2015	66	66	66	66	66	66	66	66	66	66	66	66
2014	66	66	66	66	66	66	66	66	66	66	66	66
2013												
2012												

TABLE 3.3 Info

You have entered Active Connections Only in Table 3.2; leave the cells below blank

INACTIVE (ZERO USE) SFR CONNECTIONS (Monthly)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018												
2017												
2016												
2015												
2014												
2013												
2012												

TABLE 3.4

Formula = (No. of Connections - No. of Zero Use Accounts) * Ave. Household Size

SFR POPULATION (Monthly)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018	152	152	152	152	152	152	152	152	152	152	152	152
2017	152	152	152	152	152	152	152	152	152	152	152	152
2016	150	150	150	150	150	152	152	152	152	152	152	152
2015	150	150	150	150	150	150	150	150	150	150	150	150
2014	150	150	150	150	150	150	150	150	150	150	150	150
2013	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2012	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data

TABLE 3.5

Formula = Billed Water Consumption (SFR only) / Calculated Population (SFR only)

SFR GPCD CALCULATION (Monthly)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018	47.69	44.09	59.21	163.25	278.59	280.26	351.10	255.32	211.75	134.02	60.19	51.62
2017	43.27	39.60	59.95	108.49	180.32	269.62	235.93	226.55	258.18	118.26	88.11	64.72
2016	30.13	46.10	63.99	94.55	222.33	265.69	298.60	146.44	218.77	132.75	55.09	92.31
2015	29.70	48.58	56.55	138.56	241.04	206.33	210.59	180.60	191.33	112.59	30.85	38.39
2014	48.34	43.92	60.51	146.20	158.16	223.12	221.24	203.97	199.82	119.40	57.59	51.05
2013	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2012	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data

COMMENTS:

ANNUAL DATA

TABLE 3.6

ANNUAL CONSUMPTION

TABLE 3.7

ANNUAL CALCULATION
9,004,080
7,853,877
7,709,264
6,790,702
7,007,720
N/A
N/A

TABLE 3.8

AVG. ANNUAL CONNECTIONS

TABLE 3.9

AVG CONN. CALCULATION
67
67
67
66
66
N/A
N/A

TABLE 3.10 Info

CALCULATED GROWTH RATE
0.00%
0.63%
0.88%
0.00%
N/A
N/A

TABLE 3.11

No. VACANT SFR CONNECTIONS

TABLE 3.12 Info

SIZE OF HOUSEHOLD
2.27
2.27
2.27
2.27
2.27
2.27
2.27

TABLE 3.13 Info

SFR POPULATION
152
152
151
150
150
N/A
N/A

TABLE 3.14 Info

ANNUAL SFR GPCD
162.20
141.48
139.74
124.18
128.15
N/A
N/A

DATA INPUT SHEET

Vista Redonda MDWCA

4. MULTI-FAMILY RESIDENTIAL (MFR)

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MONTHLY DATA

2018 TO 2012

TABLE 4.1 Info

MFR BILLED WATER CONSUMPTION (Monthly) (Gallons (US))

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018												
2017												
2016												
2015												
2014												
2013												
2012												

TABLE 4.2

NUMBER OF MFR UNITS (Monthly)

If only Current Number of Units is Known, put this number in Table 4.7

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018												
2017												
2016												
2015												
2014												
2013												
2012												

TABLE 4.3

MFR POPULATION (Monthly)

Formula = (Number of Units - Vacant MFR Connections) * Ave. Household Size

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2017	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2016	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2015	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2014	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2013	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2012	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data

TABLE 4.4

MFR GPCD CALCULATION (Monthly)

Formula = MFR Billed Water Consumption (Monthly) / MFR Population (Monthly)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2017	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2016	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2015	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2014	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2013	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2012	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data

ANNUAL DATA

TABLE 4.5

ANNUAL CONSUMPTION

TABLE 4.6

ANNUAL CALCULATION
N/A
N/A
N/A
N/A
N/A
N/A
N/A

TABLE 4.7

No. CURRENT UNITS

TABLE 4.8

ANNUAL UNIT CALCULATION	
N/A	
N/A	X
N/A	X
N/A	X
N/A	X
N/A	
N/A	

X = calculated from Single-family growth-rate data

TABLE 4.9 Info

MFR POPULATION
N/A
N/A
N/A
N/A
N/A
N/A
N/A

TABLE 4.10

VACANT MFR CONNECTIONS
N/A
N/A
N/A
N/A
N/A
N/A
N/A

TABLE 4.11 Info

ANNUAL MFR GPCD
N/A
N/A
N/A
N/A
N/A
N/A
N/A

DATA INPUT SHEET

5. INDUSTRIAL, COMMERCIAL & INSTITUTIONAL (ICI) AND OTHER METERED

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Instructions

MONTHLY DATA

2018 TO 2012

TABLE 5.1

ICI WATER CONSUMPTION (Gallons (US))

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018												
2017												
2016												
2015												
2014												
2013												
2012												

TABLE 5.2

OTHER METERED (Gallons (US))

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018												
2017												
2016												
2015												
2014												
2013												
2012												

COMMENTS:

ANNUAL DATA

TABLE 5.3 ICI ANNUAL CONSUMPTION	TABLE 5.4 ICI GPCD	TABLE 5.5 ICI ANNUAL CALCULATED
	N/A	N/A
	N/A	N/A
	N/A	N/A
	N/A	N/A
	N/A	N/A
	N/A	N/A
	N/A	N/A

TABLE 5.6 OTHER ANNUAL CONSUMPTION	TABLE 5.7 OTHER METERED GPCD	TABLE 5.8 OTHER ANNUAL CALCULATED
	N/A	N/A
	N/A	N/A
	N/A	N/A
	N/A	N/A
	N/A	N/A
	N/A	N/A
	N/A	N/A

DATA INPUT SHEET | Info

Vista Redonda MDWCA

6. REUSE

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Instructions

MONTHLY DATA

2018 TO 2012

TABLE 6.1

REUSE DIVERSIONS (Monthly) (Gallons (US))

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018												
2017												
2016												
2015												
2014												
2013												
2012												

COMMENTS:

ANNUAL DATA

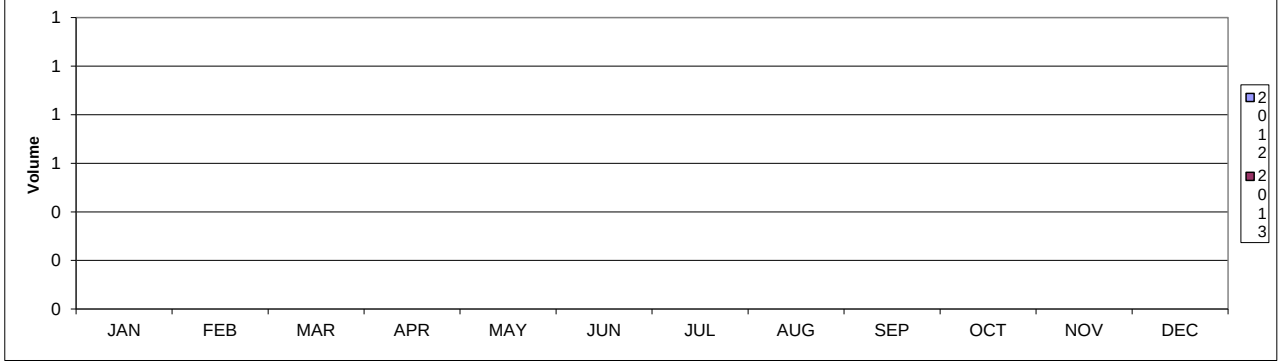
TABLE 6.2

REUSE ANNUAL DIVERSIONS

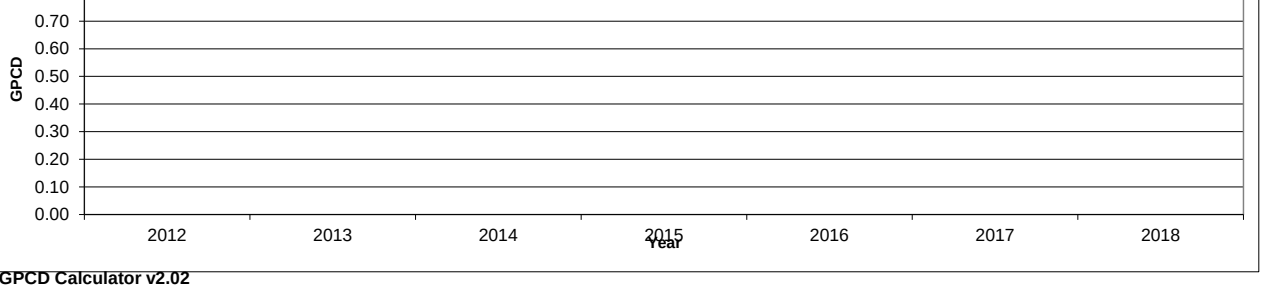
TABLE 6.3

REUSE GPCD
N/A
N/A
N/A
N/A
N/A
N/A
N/A

Reuse Volume
Graph 6.1



Reuse GPCD
Graph 6.2



DATA INPUT SHEET

Vista Redonda MDWCA

7. TOTAL WATER DIVERTED AND SUPPLIED

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MONTHLY DATA

TABLE 7.1 2018 TO 2012

TOTAL WATER DIVERTED (Monthly) (Gallons (US))

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018	259,284	236,542	328,280	766,945	1,393,810	1,271,450	1,664,970	1,228,400	1,013,110	635,660	265,620	260,780
2017	239,510	195,070	305,550	613,310	1,149,750	1,166,320	1,116,340	1,089,370	1,242,406	583,732	428,368	338,162
2016	441,430	217,980	321,190	377,040	1,089,760	1,245,370	1,387,860	633,210	1,106,520	626,189	390,840	484,320
2015	354,570	395,030	293,440	1,113,660	635,110	879,860	974,280	977,440	929,140	639,720	161,450	198,890
2014	250,070	200,414	297,850	686,750	723,410	1,011,230	1,046,180	906,180	904,710	556,530	326,580	284,930
2013												
2012												

TABLE 7.2

IMPORTED WATER (Monthly)(Gallons (US)) Info

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018												
2017												
2016												
2015												
2014												
2013												
2012												

TABLE 7.3

EXPORTED WATER (Monthly) (Gallons (US)) Info

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018												
2017												
2016												
2015												
2014												
2013												
2012												

TABLE 7.4 **Formula = Total Water Diverted + Imported water - Exported Water**

TOTAL WATER SUPPLY (Monthly) (Gallons (US))

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018	259,284	236,542	328,280	766,945	1,393,810	1,271,450	1,664,970	1,228,400	1,013,110	635,660	265,620	260,780
2017	239,510	195,070	305,550	613,310	1,149,750	1,166,320	1,116,340	1,089,370	1,242,406	583,732	428,368	338,162
2016	441,430	217,980	321,190	377,040	1,089,760	1,245,370	1,387,860	633,210	1,106,520	626,189	390,840	484,320
2015	354,570	395,030	293,440	1,113,660	635,110	879,860	974,280	977,440	929,140	639,720	161,450	198,890
2014	250,070	200,414	297,850	686,750	723,410	1,011,230	1,046,180	906,180	904,710	556,530	326,580	284,930
2013	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0

ANNUAL DATA

TABLE 7.6

ANNUAL TOTAL DIVERTED

TABLE 7.7

ANNUAL TOTAL DIVERTED CALC
9,324,851
8,467,888
8,321,709
7,552,590
7,194,834
N/A
N/A

TABLE 7.8

ANNUAL TOTAL IMPORTED

TABLE 7.9

ANNUAL TOTAL IMPORT CALC
N/A
N/A
N/A
N/A
N/A
N/A
N/A

TABLE 7.10

ANNUAL TOTAL EXPORTED

TABLE 7.11

ANNUAL TOTAL EXPORT CALC
N/A
N/A
N/A
N/A
N/A
N/A
N/A

TABLE 7.12

ANNUAL TOTAL WATER SUPPLY
9,324,851
8,467,888
8,321,709
7,552,590
7,194,834
0
0

TABLE 7.13

TOTAL POP. EST.
152
152
151
150
150
N/A
N/A

Table 7.5

SYSTEM TOTAL GPCD (Monthly)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2018	55	56	70	168	296	279	353	261	222	135	58	55
2017	51	46	65	134	244	256	237	231	272	124	94	72
2016	94	52	69	83	233	275	296	135	244	134	86	103
2015	76	94	63	248	137	196	210	210	207	138	36	43
2014	54	48	64	153	156	225	225	195	201	120	73	61
2013	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
2012	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data

COMMENTS:

TABLE 7.14

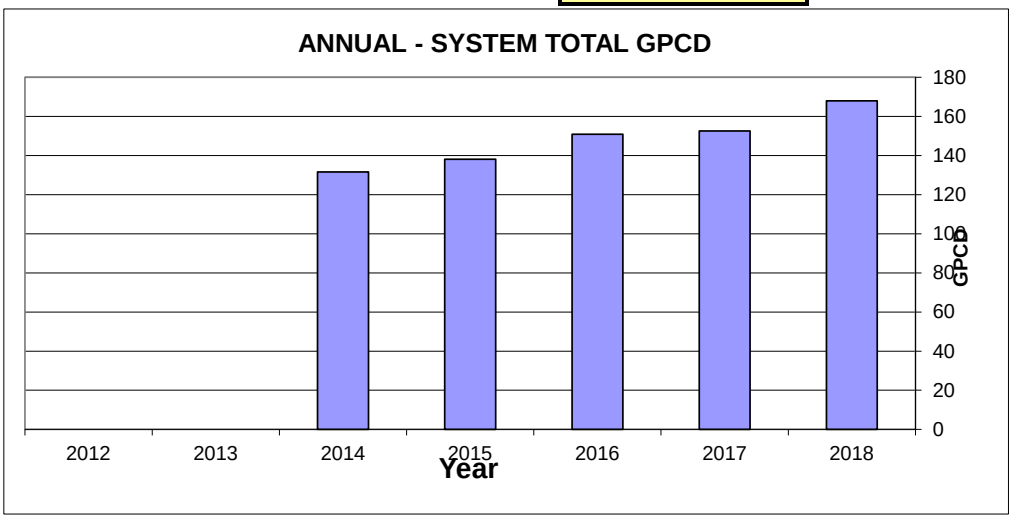
Year	SYSTEM TOTAL GPCD
2018	**167.98**
2017	**152.54**
2016	**150.84**
2015	**138.11**
2014	**131.57**
2013	**NA**
2012	**NA**

8. SUMMARY GPCD REPORTED DATA

Vista Redonda MDWCA		
2018	To:	2012

ANNUAL

Year	SYSTEM GPCD
2018	167.98
2017	152.54
2016	150.84
2015	138.11
2014	131.57
2013	NA
2012	NA

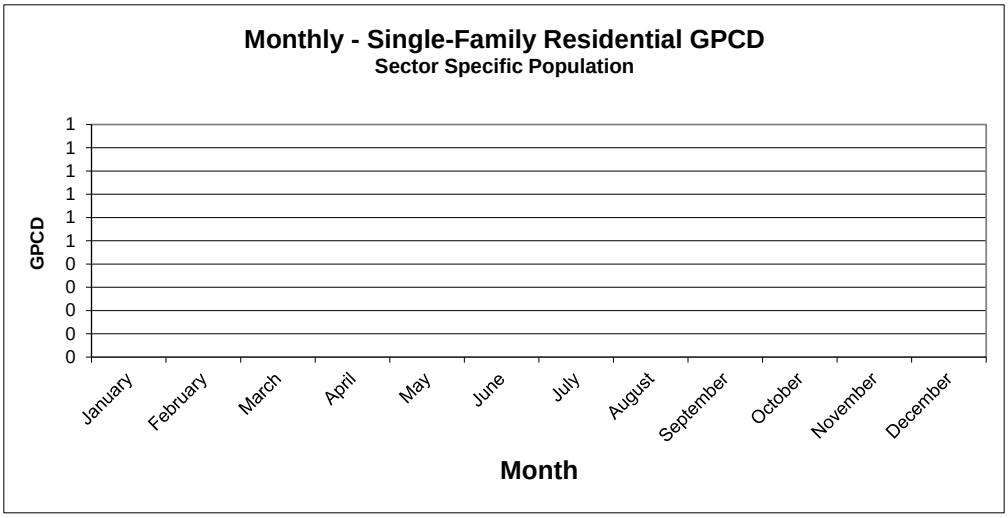


MONTHLY

Month	SFR GPCD
January	#N/A
February	#N/A
March	#N/A
April	#N/A
May	#N/A
June	#N/A
July	#N/A
August	#N/A
September	#N/A
October	#N/A
November	#N/A
December	#N/A

Year	0

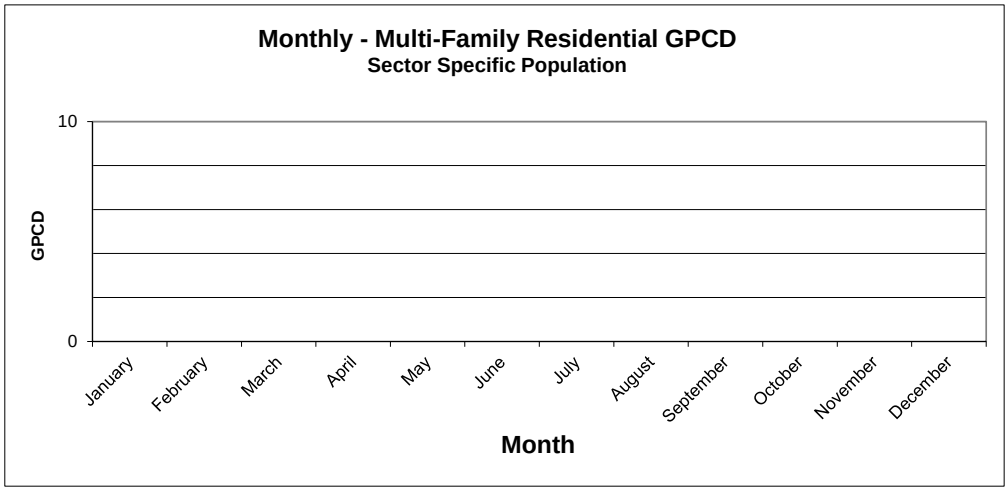
Peak/Ave	#N/A



YEAR **0**

Month	MFR GPCD
January	#N/A
February	#N/A
March	#N/A
April	#N/A
May	#N/A
June	#N/A
July	#N/A
August	#N/A
September	#N/A
October	#N/A
November	#N/A
December	#N/A

Peak/Ave	#N/A



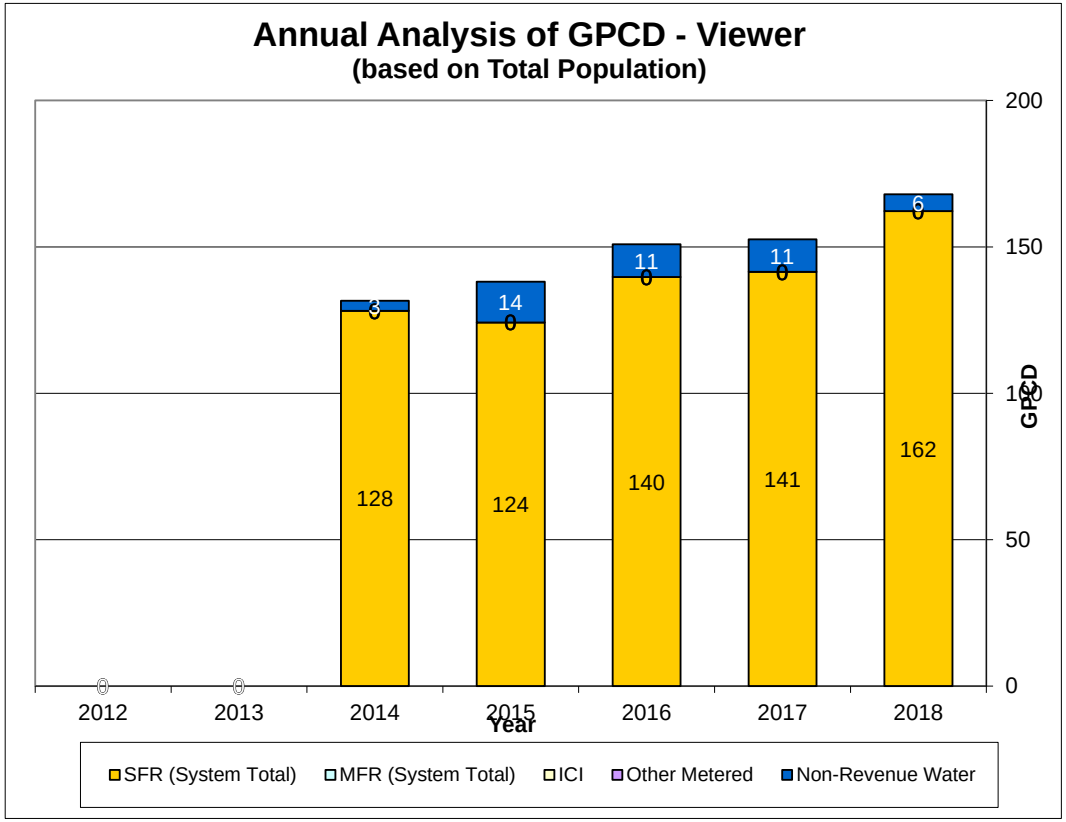
YEAR **0**

9. System Total Annual Reporting Performance

Overall Annual GPCD (based on Total Population)

	SFR (System Total)	MFR (System Total)	ICI	Other Metered	Info Non-Revenue Water	Total Supplied	Non-Revenue Volume Million Gallons (US)
Year							
On Graph?	Yes	Yes	Yes	Yes	Yes		
2018	162.20	N/A	N/A	N/A	5.78	167.98	0.32
2017	141.48	N/A	N/A	N/A	11.06	152.54	0.61
2016	139.74	N/A	N/A	N/A	11.10	150.84	0.61
2015	124.18	N/A	N/A	N/A	13.93	138.11	0.76
2014	128.15	N/A	N/A	N/A	3.42	131.57	0.19
2013	N/A	N/A	N/A	N/A	######	#VALUE!	-
2012	N/A	N/A	N/A	N/A	######	#VALUE!	-

Vista Redonda MDWCA		
2018	to	2012



10. Monthly Reporting Performance

Choose Year for Monthly Analysis

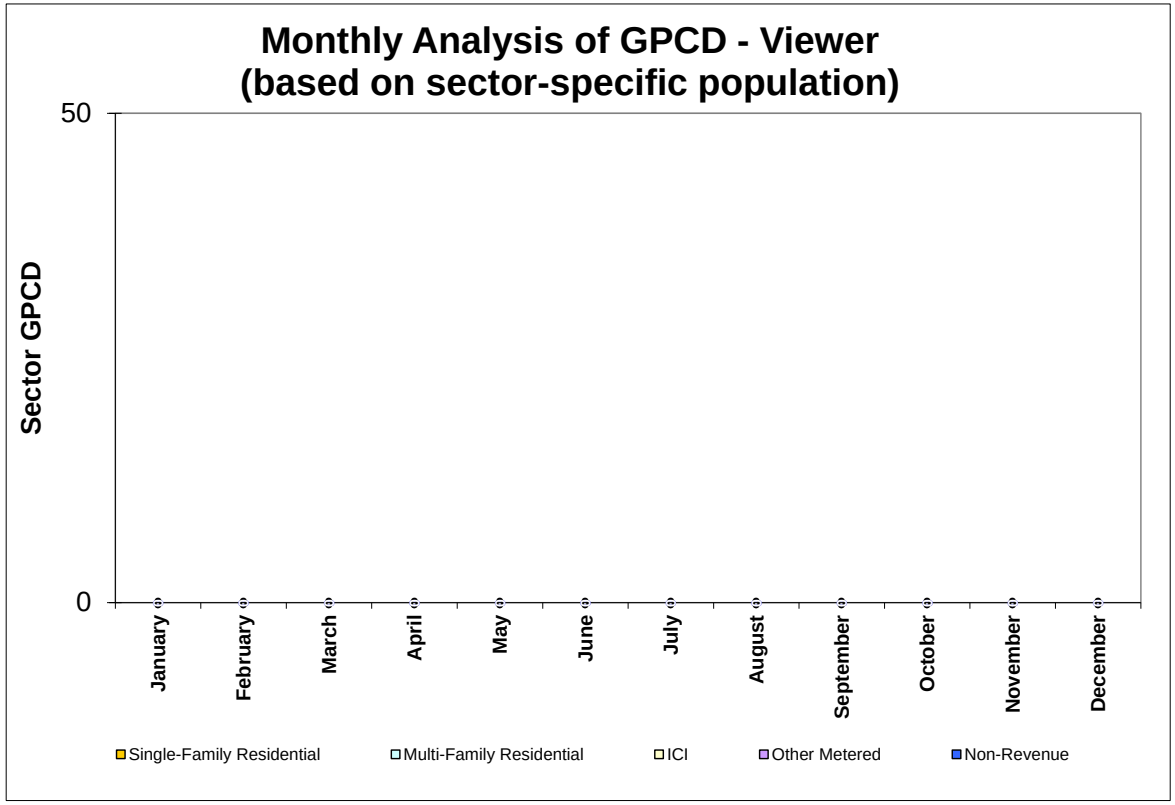
Choose Sector **Single-Family Residential**

Monthly GPCD

Month	Single-Family Residential GPCD	Multi-Family Residential GPCD	ICI GPCD	Other Metered GPCD	Non-Revenue GPCD
JAN	#N/A	#N/A	#N/A	#N/A	#N/A
FEB	#N/A	#N/A	#N/A	#N/A	#N/A
MAR	#N/A	#N/A	#N/A	#N/A	#N/A
APR	#N/A	#N/A	#N/A	#N/A	#N/A
MAY	#N/A	#N/A	#N/A	#N/A	#N/A
JUN	#N/A	#N/A	#N/A	#N/A	#N/A
JUL	#N/A	#N/A	#N/A	#N/A	#N/A
AUG	#N/A	#N/A	#N/A	#N/A	#N/A
SEP	#N/A	#N/A	#N/A	#N/A	#N/A
OCT	#N/A	#N/A	#N/A	#N/A	#N/A
NOV	#N/A	#N/A	#N/A	#N/A	#N/A
DEC	#N/A	#N/A	#N/A	#N/A	#N/A

Vista Redonda MDWCA

2018 to 2012



NMOSE GPCD Software: Definitions

GPCD v2.0 ©

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Item Name		Description
Active Connections		All active **Single Family Residential** connections within the utility. Connections that are not occupied or show zero activity are not counted in this category.
Annual Multi-Family Residential GPCD Calculation	Find	The MFR GPCD is Annual MF Calculation (4.6) divided by the annual MFR Population (4.9).
Annual Single Family Residential GPCD Calculation	Find	The SFR GPCD is Annual SFR Calculation (3.7) divided by the annual SFR Population average (3.13).
Billed Water Consumption (Multi-Family Residential)	Find	This is the total billed consumption for **Multi-Family** residential uses only. Provide the amount of water used (gallons) for multi-family residential connections by month in Table 4.1, or by year in Table 4.5. If multi-family residential is not available as a separate category, provide an explanation in the Comments Box and include usage in the Industrial, Commercial and Institutional Table 5.1 or Other Metered Table 5.2 on Sheet 5.
Billed Water Consumption (Single-Family Residential)	Find	This is the total billed consumption for **Single-Family** residential uses only.
Calculated Growth Rate	Find	The calculated growth rate is a calculation developed to normalize the data to the growth in the utility. The growth is determined by evaluating the percentage change in the number of connections within the utility on an annual basis, provided in Table 3.9 Average Connections Calculated. If there are no more than one years' data, then this will not be calculated. This Table is for the utilities use in checking the growth percentage calculated against their own estimates. It is also used in Table 4.8 Number of (Multi-Family) Units if only the current number of multi-family units can be provided.
Census Data	Find	The Census data is used to standardize the calculation of population by utilizing numbers of people per household. It also records information on the vacancy rate within each city which enables calculation of the number of households actually being used. There is a link to a pdf document in Definitions showing the user how to find and record the relevant data.
Converter	Find	The user may develop a GPCD Analysis based on one of two input unit selections: 1) Gallons (US) 2) Cubic feet Please select the units from the instructions worksheet. An interactive unit converter is also provided below. Input volume in first box below and select units to be converted. 1 | Gallons (US) = 0.134 | Cubic Feet
Exported Water	Find	Enter all water exported from the system. This will include any pass-through arrangements or wholesale contracts to other drinking water suppliers, where the reporting utility is the water rights permit holder.
GPCD		Gallons per capita per day (GPCD) is a method utilized internationally to measure water use by drinking water suppliers. It is most commonly used to describe historical and current water uses, providing a baseline of water use that is not as susceptible to changes in population. GPCD is also used for planning purposes, allowing estimates of future demand requirements based on localized population projections. More sophisticated planning efforts utilize GPCD to determine conservation potential, track the results of program implementation, and calculate projections based on conservation adjusted GPCD.
General Information		The white boxes are data entry cells and are used for inputting data. All other cells except dropdown menus (purple boxes) are protected for the user's benefit to stop any overwriting of formulas and calculated cells. The green boxes are values that have been calculated based on inputs.
Graphing Results	Find	Datasets will automatically be graphed when using the graphing data tools in both the Annual and Monthly Performance worksheets. For example, choosing the year and the use sector from the purple dropdown boxes will allow these variables to be graphed.
Imported Water	Find	Enter all water imported from other systems. This will include any retail contracts with other drinking water suppliers where this utility purchases water from another utility and is not the permit holder.
Inactive and Zero Connections	Find	The inactive and zero connections are recorded in Table 3.3 so that unused single family residential connections will be removed from the calculation of single family population when Total Units is chosen from the drop down list in Table 3.2.

Industrial, Commercial and Institutional (IC	Find	Includes industrial properties, such as manufacturing, commercial properties such as restaurants, shopping malls, and institutional customers such as schools, universities and prisons.
Multi-Family Residential Connections	Find	A multifamily unit is living units in an apartment complex, duplexes, triplexes, trailer parks, and condo or town houses that have multiple units serviced by a single connection. They are not counted in the single-family residential category.
Multi-Family Residential Population	Find	Multi-family population is calculated from number of MFR units in the Annual Unit Calculation (4.8) minus Vacant MFR Connections (4.10). That number is then multiplied by Average Size of Occupied Housing Units from the US Census (2.1).
Non-Revenue Water		Non-revenue water is all the water the utility diverts and/or produces, but does not get paid for. Non-revenue water includes apparent losses such as meter inaccuracies, theft, and database errors, real losses such as leaks. It also includes unbilled authorized uses such as fire-fighting, line flushing and disinfection. The Calculator does not provide data entry for unmetered billed water. This might include bulk sales or monthly fees not based on usage. The non-revenue water in the Calculator includes all water that is not metered.
Other Metered	Find	All categories of billed metered use that is not otherwise classified in SFR, MFR or ICI. This provides the user the opportunity to track alternative categories. Examples included irrigation only, stand pipes, and fire hydrant/construction meters. Everything not included in SFR, MFR, ICI or Other will end up in non-revenue water.
Reuse	Find	Reuse, or Recycled water is former wastewater (sewage) that has been treated to remove solids and certain impurities and reused by a water supplier. In most locations, it is only intended to be used for nonpotable uses, such as irrigation, and dust control. This data is not included in any other calculation. It is provided as a tracking tool for the user.
Single Family Residential Connections	Find	SFR Connection is a stand alone or independently metered housing unit. The number used in the Calculator can be Total Connections or Active Connections only.
Single Family Residential Population	Find	Single Family Population (3.13) is calculated from number of active connections times size of average household (3.12). It can be calculated monthly or annually depending on the data provided. If Total Connections is chosen (3.2), then inactive connections are subtracted prior to multiplying by size of average household (3.12). If Active Connections is chosen (3.2), then number of connections are multiplied by size of average household (3.12) without any subtractions.
Size of Average Household	Find	This Table is determined from the US Census data in Table 2.1, Sheet 2. This data is used to determine a total single-family population and total multi-family population for both the monthly and annual data (Tables 3.4 and 3.13, Tables 4.3 and 4.9 respectively).
Total Connections		All active and inactive **Single Family Residential** connections within the utility.
System Total GPCD	Find	The System Total GPCD is calculated by dividing the quantity of Total Water Diverted (plus imports minus exports) by the System Total Population
Total Population	Find	The Total Population estimate is the sum of the single-family population + multi-family population + group quarters population.
Vacant Single-Family Residential Connections	Find	This is a calculated field using either i) the average of the monthly vacant SFR connections, if monthly data are available or ii) an estimated value based on the Census data vacancy rate multiplied by the number of Total SFR connections. When Total Connections is chosen in Table 3.2, vacant single family residential connections are subtracted from Total Connections prior to calculating a population (based on household size) and a single family GPCD.

How to find the data required for Census section