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March 25, 2019

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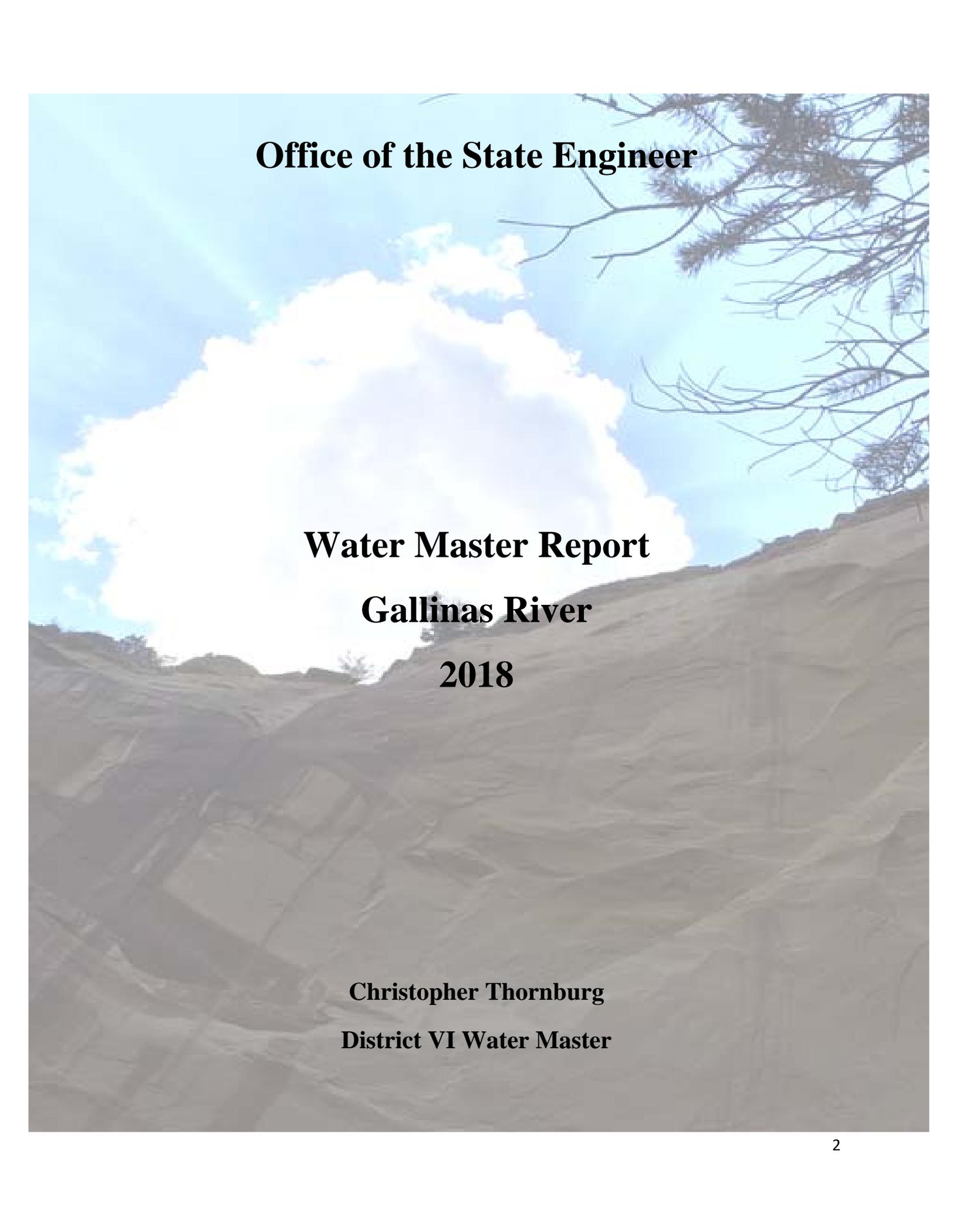
Mr. D'Antonio Jr.,

I am pleased to submit the following report of Water Master activities on the Gallinas River during the 2018 irrigation season.

Sincerely,

A handwritten signature in blue ink, appearing to read "Chris Thornburg", written over a dotted line.

Christopher M. Thornburg
District VI Water Master
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Office of the State Engineer

**Water Master Report
Gallinas River
2018**

**Christopher Thornburg
District VI Water Master**

Table of Contents

	<u>Page</u>
A. Letter of Transmittal	1
B. Title Page	2
C. Table of Contents	3
D. Tables and Attachments	4
E. Introduction	5
F. Authority	6
G. Active Water Resource Management (AWRM)	7
H. Gallinas River Basin Location Map	8
I. 2018 Gallinas River Events	9
J. 2018 Gallinas River Metering and Infrastructure	12
K. 2018 Gallinas River Deliveries	16
a. Gallinas River Upper Reach Deliveries	18
b. Gallinas River Middle Reach Deliveries	19
c. Gallinas River Lower Reach Deliveries	23
L. 2018 Gallinas River Voluntary Rotation Schedule	26
M. 2018 Live Storage Capacities	27
N. 2018 USGS Gauges	28
O. 2018 Gallinas River Basin Annual Snowpack	29
P. 2018 Gallinas River Basin Annual Precipitation	30
Q. Summary	31
R. Attachments	32

Tables

		<u>Page</u>
Figure 1	Gallinas River Basin Location Map	8
Figure 2	2018 Gallinas River Diversion Summary	17
Figure 3	Upper Gallinas Water Users Area Map	18
Figure 4	Middle Gallinas Water Users Area Map	19
Figure 5	Lower Gallinas Water Users Area Map	23
Figure 6	San Augustin Ditch Over-diversions	24
Figure 7	2018 Live Storage Capacities	27
Figure 8	2018 USGS Gages Daily Flow Averages	28
Figure 9	2018 NOAA SNOTEL Monthly Snowpack Averages	29
Figure 10	2018 NOAA Annual Precipitation	30

Attachments

		<u>Page</u>
A.	2018 Rotation Schedule	32-39
B.	Gallinas River Below Middle Diversion Revised Rating Table	40
C.	Order on Project Diversion Requirements	41-44
D.	NMSA § 72-3-1 & NMSA § 72-3-2	45
E.	NMAC § 19.26.11	46-48
F.	NMAC § 19.25.13	49-60

Introduction

This Water Master Report is in accordance with requirements established in 19.25.13.26 NMAC:

Annually, the water master shall submit a report including a record of total diversions and deliveries of direct flow water and storage water, as applicable, a statement of expenditures, a list of infrastructure and metering improvements needed or performed, problems encountered, and any other pertinent issues or aspects of administration. The report shall also address the amount of water needed to supply the water master district, the amount available, the works which are without their proper supply, the supply required during the period preceding the water master's next regular report and such other information as the state engineer may require. The report shall be submitted to the state engineer and be publicly available for inspection and copying at the requestor's expense.

[19.25.13.26 NMAC – N, 12/30/2004]

Authority

72-3-1 NMSA (1978). Water Districts; Creation; Change; Sub-Districts. This statute provides the state engineer with the authority to designate water districts within the state of New Mexico for the satisfactory apportionment of water.

72-3-2 NMSA (1978). Water Masters; Appointment; Removal; Duties. This statute provides the state engineer with the authority to apportion the waters of the Gallinas River through the appointment of a water master.

19.25.13 NMAC (December, 2005). Active Water Resource Management. This administrative regulation describes the general authority and specific duties of an appointed water master, including active management and prior appropriate apportionment of Gallinas River waters from the source to the headgate.

19.26.11 NMAC (August, 2003). Declaration of the Gallinas Water Sub-District of the Pecos River Stream System. This administrative regulation establishes the Gallinas River Sub-District, and appoints a water master to administer the waters of the river.

5th New Mexico District Court. Order on Project Diversion Requirements (April, 2014). This judicial order resolves all disputed Project Diversion Requirement (PDR) and maximum diversion concerns by setting the off-farm conveyance efficiency factor (OFCE) for ditches at 65% and the PDR at 3.077 acre-feet per acre per year. This order has been stipulated by the Office of the State Engineer (OSE), the United States, and all affected Gallinas River stakeholders.

Active Water Resource Management (AWRM)

The Gallinas River Basin is one of seven priority basins in New Mexico that was recognized by the Active Water Resource Management (AWRM) initiative (Attachment F) launched by the State Engineer in 2004 in response to continued drought conditions throughout state. AWRM refers to the essential tools and elements needed to enable the State Engineer to actively manage the state's limited water resources. One of these tools includes the use of metering stations located within the infrastructure of New Mexico's vast system of acequias to help manage the use of available water in a fair, consistent and measurable manner. Another key tool with AWRM is the appointment of Water Master(s) to each priority basin. The Water Master(s) appointed to each basin are tasked with maintaining these metering stations and managing the equitable distribution of the water. The State Engineer also uses other tools to assist in AWRM, such as the use of shortage sharing and rotation agreements amongst users in a basin (Attachment A). The Gallinas River Basin is no exception and has been successfully using rotation agreements among users for many years. Successful implementation of AWRM policy and procedure are critical components for equitable distribution of water and shortage sharing of diminishing water supplies due to persistent drought conditions in our state.

The Gallinas River Basin is located in north-central New Mexico (Figure 1). The drainage basin of the Gallinas River and its tributaries contains approximately 610 square miles. The Gallinas River head waters are located on the eastern slopes of the Sangre de Cristo Mountains, at an elevation of approximately 11,660 feet. From its headwaters, the river traverses southeasterly approximately 85 miles and enters the Pecos River six miles upstream of the Village of Colonias. The city of Las Vegas is located in the north-central part of the drainage basin. The Gallinas River has no major perennial tributaries. The larger tributaries are Porvenir Canyon, Trout Springs, Cañon Bonito, Pecos Arroyo, and Aguilar Creek.

Gallinas River Water Master District

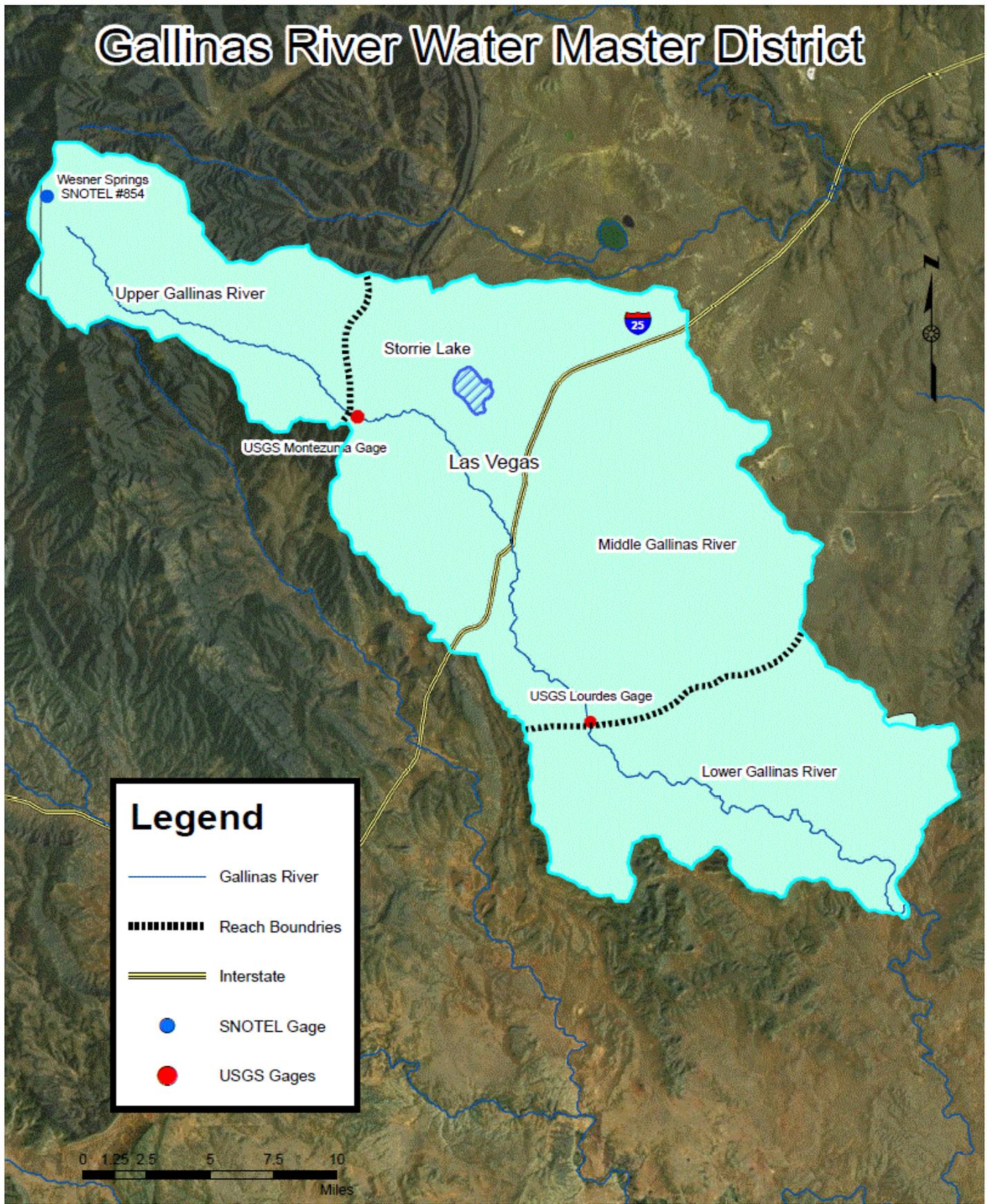


Figure 1

2018 Gallinas River Events



Dry Gallinas River at the intersection of Cinder and Cunningham Road in Las Vegas, June 25, 2018

The State of New Mexico experienced extreme drought in 2018. The water supply within many of the State's river courses went completely dry. The Gallinas River (the river) was no exception. The river experienced much drier than normal conditions starting in the early spring of 2018 and running the entirety of the year. The 2018 irrigation season which started April 1 and ended October 31, was almost non-existent in the Gallinas River Basin. Virtually no snowpack was recorded from October 2017 to March 2018 at the SNOTEL (Figure 9) site at Wesner Springs. The resulting spring runoff, which normally occurs between the middle of March and the middle of April, did not occur in 2018. The 2018 Gallinas River Voluntary Rotation Schedule (rotation schedule) was scheduled to begin April 1, 2018. Due to no available water in the river, the rotation schedule was suspended by the Gallinas Water Master (water master) and ran intermittently through the entirety of the 2018 irrigation season. As shown in the picture above, the river in areas of the middle and upper reaches went completely dry in June of 2018. The middle reach of the river, which typically averages between 3-20 cubic-feet per second (cfs) in the summer months prior to the monsoon season, averaged approximately 0.5-1.5 cfs, and went completely dry in many areas. Many water users in the upper reach of the river told the water master they had never witnessed the river going dry since living in the area. The upper reach of the river near the Upper Maestas Acequia headgate down to the Gallegos Ditch headgate was dry. The river then reappeared further down the canyon flowing at approximately 0.25 cfs. The drying trend continued for several weeks during the summer.

The water master manually measured inflows from Trout Springs at the Gallinas River confluence on June 21, 2018. The recorded flow from Trout Springs was 0.69 cfs where it enters the river at the confluence. The total flow of the river on the same date at the United States Geological Survey (USGS) Montezuma Gage # 08380500 was ~1.04 cfs, thus proving the primary source of water in the river throughout the middle reach was from the flow of Trout Springs during this time period.

The water master received several phone calls concerning the dying fish population in the river due to low or no water level in the river. The shallow ground water in many areas along the river suffered from the drought as well. The result was much lower water levels in domestic wells and in some cases resulted in wells going dry. Multiple times throughout 2018 there was absolutely no water available for irrigation, leisure, fishing, or practically any other purpose. The City of Las Vegas (the city) relied heavily upon the 1200 acre-foot (af) bulk purchase of water from the Storrie Project Water Users Association (SPWUA). This purchase was approved for use on January 10, 2017, by the New Mexico Office of the State Engineer (OSE) under Permit No. SP-341 to supplement the city's diversion from the river. As a result of the available water in the lake, the city was able to maintain adequate storage in Peterson Reservoir throughout the summer and supply its residents water without imposing further water restrictions than were already in place since 2014. The city's return flow to the river from the Las Vegas Waste Water Treatment Plant (LVWWTP) at the end of town, supplied enough flow in the river to allow irrigators in the lower reach of the river to continue normal farming operations that resulted in no crop loss. Oddly, there was even one case of a serious over-diversion by an acequia. By contrast, many of the area farmers within the middle and upper reaches of the river chose not to plant any crops in 2018 for fear of losing the crop due to lack of irrigation water.

Some much needed rain showed up in late July 2018 raising the level in the river. The average daily flows in the river, as recorded at the Montezuma USGS gage, went from <1 cfs up to 13.7 cfs in a two week time frame. Although the increase in precipitation was not substantial enough to repair the damage done by excessive summer heat and extreme drought conditions, the rain brought some relief to the area. The river which had been previously dry in the middle reach, took almost ten full days to replenish the shallow groundwater to a point that allowed the river to begin flowing at the surface again. The water master monitored the slow progression of the river through town. At one point, the river disappeared into a deep area in the river bed. It took days for the water, flowing at an average of 4.0 cfs, to move past this observation point which is just northwest of Mills Avenue. The end of the irrigation season was also very dry but some rain fell providing a less than average sustained flow of water in the river. River flows in the winter months of 2018 showed some signs of improving with the coming of snow in December.

The proposed partial judgment and decree in the Gallinas Section of the Pecos River was completed by the OSE in late 2017. A motion was filed by the OSE for entry of the proposed partial decree, which began the inter se process. Prior to the deadline for objections to the proposed partial judgment and decree on April 19, 2018, a total of 44 objections were received and are being heard through the Fifth Judicial Court with the protesting party and water rights owners. The water master has been assisting stakeholders on the river as needed, and is also assisting the OSE legal team advancing the adjudication of the water rights on the river. In one instance of these proceedings, the stakeholder settled with the protesting party and agreed to permanently abandon water rights on 4.8 acres of land, thereby decreasing the total amount of water being diverted from the river by 9.6 acre-feet per annum (afa).

Several ditches within the lower reach of the river did not divert water in 2018 due to damage to works on the ditch sustained during flooding in the 2017 irrigation season. All flows recorded on the ditches with damaged works this past season are from high flows during storm events. The West Chaperito Ditch remains in total disrepair and unable to divert water for irrigation. The Mays, formerly diverting off the La Liendre - Acequia Arriba, continue their efforts with the water master to gain compliance on their permitted river pump under OSE Permit No. SD-03229-8 POD2 to continue irrigation on the property.

Once again in 2018, the OSE had theft issues at the Roundhouse Acequia and the San Augustin Acequia stations and tens of thousands of dollars of equipment were stolen. The water master contacted appropriate law enforcement agencies for each area to report the thefts. The OSE will be taking measures to reinforce or relocate the measurement stations prior to bringing them back online. Additionally, the OSE is researching methods for adding video surveillance to remote and hidden sites such as these, to reduce incidents.

****The OSE will prosecute anyone who tampers with these stations to the fullest extent of the law.****

Metering and Infrastructure

Gallinas River Measurement – The water master took advantage of extreme drought conditions in 2018 to measure the river at the Pecos Arroyo confluence southwest of the city. The OSE operates and maintains a measurement station just prior to the confluence which is located about ¼ mile to the north of the LVWWTP. The river was flowing historically low through this area in the middle reach, and had previously never been manually measured at such extreme low flows. These flows are recorded and can be viewed on the Real Time Measurement Site (RTMS) operated by the OSE on its website. The link to this website can be found further in this report. The water master used a 0.7 cfs flume (pictured below) to record flow on the river and produce a revised flow curve (Attachment B) to update higher flows and depict low flows which had previously never been recorded. This new curve was then used to determine incremental flow starting from “zero flow”. The mathematical formulae and resulting new flow curve, were programmed into the measurement station and began accurately reporting extreme low flows in mid-July 2018.



Measurement on the Gallinas River at the Pecos Arroyo confluence, June 4, 2018

Acequia Measurement

Acequia Repairs:

- The water master continued efforts to get the Noble river pump, OSE Permit No. SD-02988-1 POD2, in compliance with the permit Conditions of Approval requiring a meter on their permitted river pump. The permit to allow use of the river pump was approved in 2015 and the Nobles continue to be out of compliance. Compliance action or permit revocation by the OSE will be pursued in 2019 if further non-compliance by the Nobles persists.
- The water master noted several times that water was passing under the flume on the Acequia Madre de Las Vegas through passages created by an excessive amount of craw-dads burrowing under and around the flume. The OSE took steps in late 2018 to rehabilitate the flume with structural concrete additions aimed at stopping the leakage around the flume. The Mayordomo aided in the additions to the measurement station.

- Pappen Ditch is a private ditch owned by Lupe Trujillo. The headgate on the Pappen Ditch was destroyed by the 2011 river flood and now runs water all year. However, the ditch has a desauque prior to the turn-out onto the property which returns the flow back to the river when it is not being used for irrigation. The water master has called the owner on multiple occasions and requested that the owner repair the works on the ditch. The water master informed the owner that funding is available for repairs to ditch works. To date, no repairs have been made.
- The La Concepcion Ditch did not irrigate in 2018. During a flood event in late 2017, the La Concepcion sustained damage to part of the ditch and most of the headgate works, rendering the ditch unusable. Damian Lujan, Mayordomo on the ditch, informed the water master he most likely wouldn't irrigate in 2018 because of the damage to the ditch. Prior to use in the 2019 irrigation season, repairs will need to be made to fix the areas where the ditch and headgate are damaged or blown out.
- The river pump used by Stacy Montaña (formerly Acequia La Bereda Blanca) was also damaged by the flood in September 2017. Mr. Montaña informed the water master he would not irrigate with the river pump in 2018. No subsequent repairs have been made to the river pump.
- The Ancon Del Gato headgate was damaged by the flood in late 2017 and will require repairs by the acequia to operate correctly.
- The river pump operated by Bill and Dorothy May under OSE Permit No. SD-03229-8 POD2 (formerly diverting off the La Liendre – Acequia Arriba) continued to work with the water master in 2018 to get their water rights in compliance to continue irrigation of 17.97 acres. The water master approved Applications for Extensions of Time (ET) to perfect water rights on June 12, 2018. The Mays did not irrigate throughout the 2018 irrigation season because the approved ETs require the owner to submit a plat map to show retired acreage for the approved permit SD-03229-8 POD2 to use a pond for irrigation, prior to further irrigation. The Mays informed the water master they are attempting to complete the necessary steps in order to continue irrigating in 2019.
- West Chaperito Ditch headgate and most of the ditch are in disrepair. Ditch operators will need to make major repairs to restore the capability to divert and convey water for irrigation purposes. The West Chaperito Ditch has not irrigated in many years.

Future Meter Installations:

- Ancon Del Gato will require a metering station on the ditch. The requirements for the size, type and location of installation are yet to be determined.
- Acequia Agapito Vigil will require a metering station on the ditch. The requirements for the size, type and location of installation are yet to be determined.
- La Liendre – Acequia Arriba (Mays river pump) is a permitted river pump SD-03229-8 POD2 and will require a meter, installed and maintained by the applicant.

- Agapito Vigil (Noble river pump) is a permitted river pump SD-02988-1 POD2 and will require a meter, installed and maintained by the applicant.
- The city WWTP and the OSE are working together to install a meter in 2019 to document the city's return flow from their treatment facilities in the future. This data will be available on the RTMS.

The city of Las Vegas Measurement and Infrastructure – Low flows in the river made it possible for the city to drain and dredge the Skating Pond (see picture below) which is located in the river upstream of the Montezuma Castle. The city used funding obtained to dredge roughly 3,500 cubic yards of sediment from the Skating Pond. The pond, which is fed directly by the river and subject to annual flooding which can carry high sedimentation, is used by local residents for leisure and is stocked with fish by the New Mexico Game and Fish Department. Additionally, the city possesses approved OSE Permit No. SP-2662 POD2 for a second point of diversion (POD) from the Skating Pond which is currently unused by the city. Dredging and cleaning of the pond would greatly aide in enabling the use by the city of the second POD if needed.



Gallinas River at City of Las Vegas Ice Skating Pond, April 23, 2018

On July 12, 2018, the city applied for and obtained OSE Permit No. SP-341 to store water in Storrie Lake. The permit allows the city to store a total of 2,300 af of wet water in the lake. This additional storage allows the city to add and remove water from the lake to supplement their demand as needed. Although the total storage amount permitted by the OSE is 2,300 af, the current agreement between the city and SPWUA at this time is for a lesser amount of storage in

Storrie Lake. The approved OSE Permit No. SP-341 for storage increases the total permitted and adjudicated amount of storage for the city to 2826 af. The city began metering incoming and outgoing water from Storrie Lake upon receipt of the approved permit and is currently reporting that usage to OSE per the permit Conditions of Approval. The remainder of the water from the city's bulk water purchase under OSE Permit No. SP-341 on January 10, 2017, is currently occupying most of the city's 800 af of storage in Storrie lake.

Bradner Dam renovation is ongoing. City officials informed the OSE that dam renovations should be completed in early 2019.

The Real Time Measurement Site (RTMS) - The RTMS, operated by the OSE, is used to record real time measurement at the state's measurement stations located throughout the State of New Mexico. All the information on the RTMS is available to the general public via the OSE website found below. Individual station records can be broken down by hourly, daily or monthly usage and stage height. The data is recorded every 15 minutes from the measurement site and updated on the website every hour. The records can be downloaded or printed depending on the needs of the individual.

The website can be accessed through the following links:

Measurement on Statewide sites can be found here: <http://meas.ose.state.nm.us/meas/home.jsp>

Measurement on the Gallinas River can be found here:

<http://meas.ose.state.nm.us/meas/subbasin.jsp?id=Gallinas#title>

2018 Gallinas River Deliveries

This section of the 2018 Gallinas Water Master Annual Report is a detailed outline of the total usage by all stakeholders from the river within their individual reaches. It is a showcase of the stakeholders that are continually improving the infrastructure on their respective acequias, working together and with the water master to improve relations between themselves and the OSE. It is also used to highlight those with total disregard to their adjudication, the community and the state laws that govern all users.

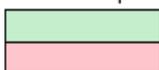
The 2018 Gallinas River irrigation season ran from April 1 to October 31. The 2018 Irrigation Season Summary table (Figure 2) and this section are a complete summary of the Gallinas River Basin usage recorded by the OSE during the 2018 irrigation season. The water master monitored river flows in each respective reach of the river and made modifications using the OSE operated river gate based upon user needs and observations. Water usage was recorded by the OSE with various types of measurement stations on many of the acequias, the city, SPWUA, and the river gate at the SPWUA diversion. The flow on the river was measured by the USGS gages at Montezuma, Lourdes and Colonias (Figure 8). This information was used daily by the water master to assist in the administration of the water on the river.

2018 Gallinas River Diversion Summary*

NAME	PRIORITY DATE	TOTAL IRRIGATED ACRES	NET EVAP-LOSS FOR PONDS (AF)	PDR AMOUNT (AF)	MAX ANNUAL DIVERSION (AF)	DIVERSION (AF)	DIFFERENCE (AF)	% OF ADJUDICATED DIVERSION AMOUNT
City of Las Vegas (COLV) - JUNIOR	01/01/1881	N/A	N/A	N/A	2,600.00	1,557.08	1,042.92	59.90%
City of Las Vegas (COLV) - SENIOR	12/31/1848	N/A	N/A	N/A	185.36	0.00	185.36	0.00%
Montezuma Pipe Line (River Pump-UWC)	12/31/1883	8.00	N/A	N/A	3.00	2.98	2.98	0.82%
Gallinas Canal Acequia	12/31/1888	774.23	14.58	3.077	2,404.74	32.26	2,372.48	1.34%
Agapito Vigil (River Pump-Noble)	12/31/1848	2.10	N/A	2.0	2.10	0.00	2.10	0.00%
Acequia Agapito Vigil	12/31/1848	11.78	N/A	3.077	36.25	NO METER	NO METER	0.00%
Storrie Project Water Users Association (SPWUA)	10/7/1909		1,219.86	N/A	19,447.00	1,095.84	18,351.16	5.64%
Acequia Madre De Los Vigiles	12/31/1848	172.09	3.30	3.077	534.60	352.53	182.07	65.94%
Grezlachowski	12/31/1848	75.24	10.08	3.077	247.02	253.26	-6.24	102.52%
Acequia Madre De Los Romeros	12/31/1848	216.03	11.22	3.077	681.97	196.12	485.85	28.76%
Nuestra Senora De Los Dolores De Las Vegas	12/31/1848	25.65	1.80	3.077	81.69	3.98	77.72	4.87%
Acequia Madre De Las Vegas	12/31/1848	77.91	1.80	3.077	242.50	203.49	39.01	83.91%
Roundhouse**	12/31/1850	129.51	0.09	3.077	398.64	224.47	174.17	56.31%
Pappen	12/31/1875	53.20	N/A	3.077	163.70	21.92	141.78	13.39%
San Augustin**	12/31/1841	73.14	N/A	3.077	225.05	1,116.21	-891.15	495.98%
La Bereda Blanca (River Pump-Montano)	12/31/1871	17.20	N/A	2.0	34.40	0.00	34.40	0.00%
La Bereda Blanca (River Pump-Allemand)	12/31/1871	66.13	N/A	2.0	132.26	47.43	84.83	35.86%
La Concepcion	12/31/1868	34.10	N/A	3.077	104.93	1.76	103.17	1.67%
Ancon Del Gato	12/31/1871	64.80	N/A	3.077	199.39	NO METER	NO METER	0.00%
La Liendre	12/31/1848	17.97	N/A	3.077	55.29	FALLOW	FALLOW	0.00%
West Chaperito Community Ditch	12/31/1850	106.50	N/A	3.077	327.70	20.39	307.31	6.22%
Various Unmetered Ditches		212.06	11.65	3.077	664.15	NO METERS	NO METERS	0.00%
Totals		2,137.64	1,274.38		31,060.10	5,145.82		

* All data is provisional and subject to change

**Meter was vandalized and was not in operation the entirety of the 2018 irrigation



The total recorded annual diversion for the user is at or below the adjudicated diversion amount

The total recorded annual diversion for the user is above and beyond the adjudicated diversion amount

Figure 2

Gallinas River - Upper Reach

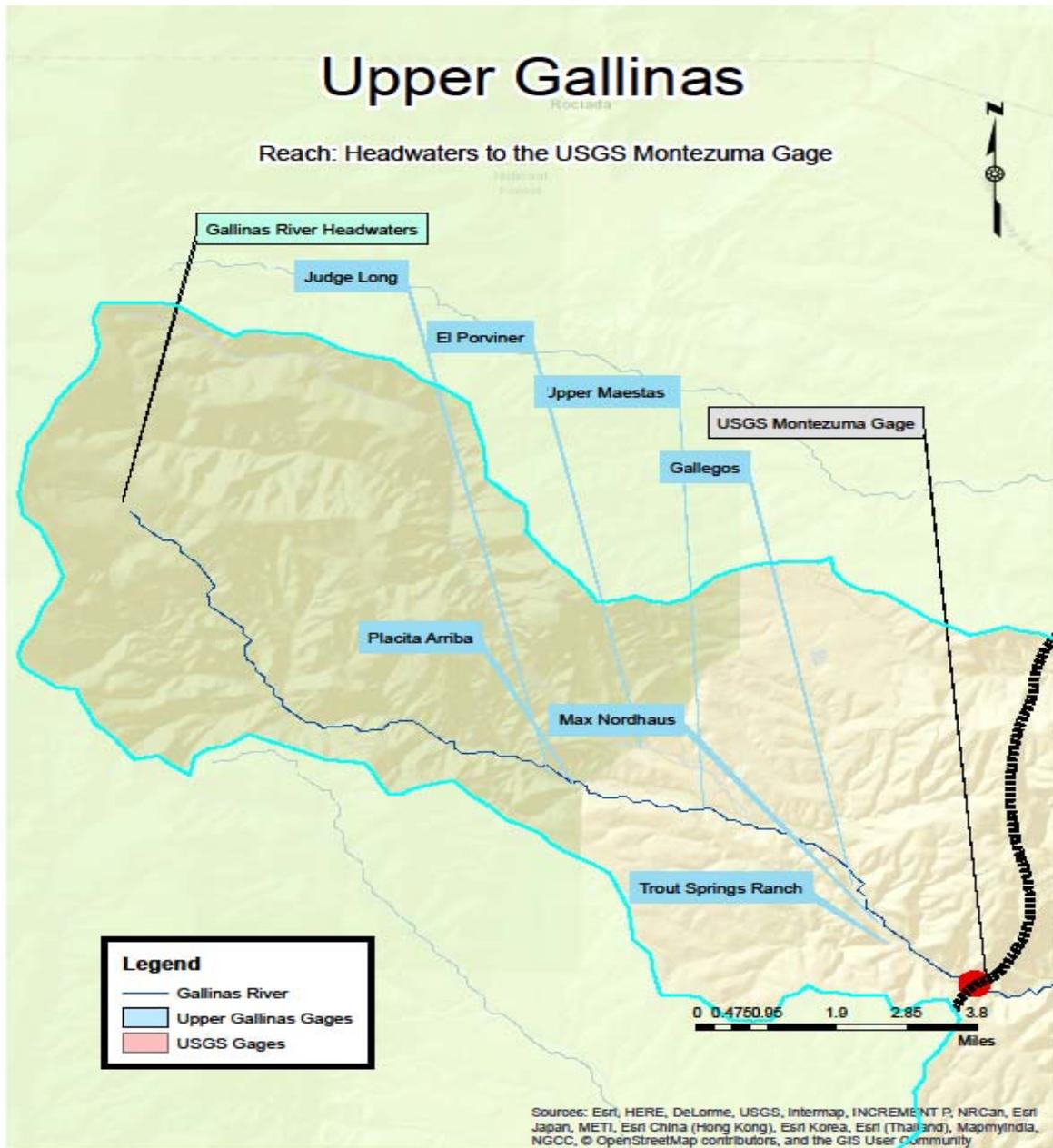


Figure 3

There are seven acequias in the upper reach of the river which are monitored by the water master and have no OSE metering installed to date. These acequias are subject to the project delivery requirement (PDR) of 3.077 acre-feet per acre per annum (af/ac/an) for the Gallinas River acequias.

Gallinas River - Middle Reach

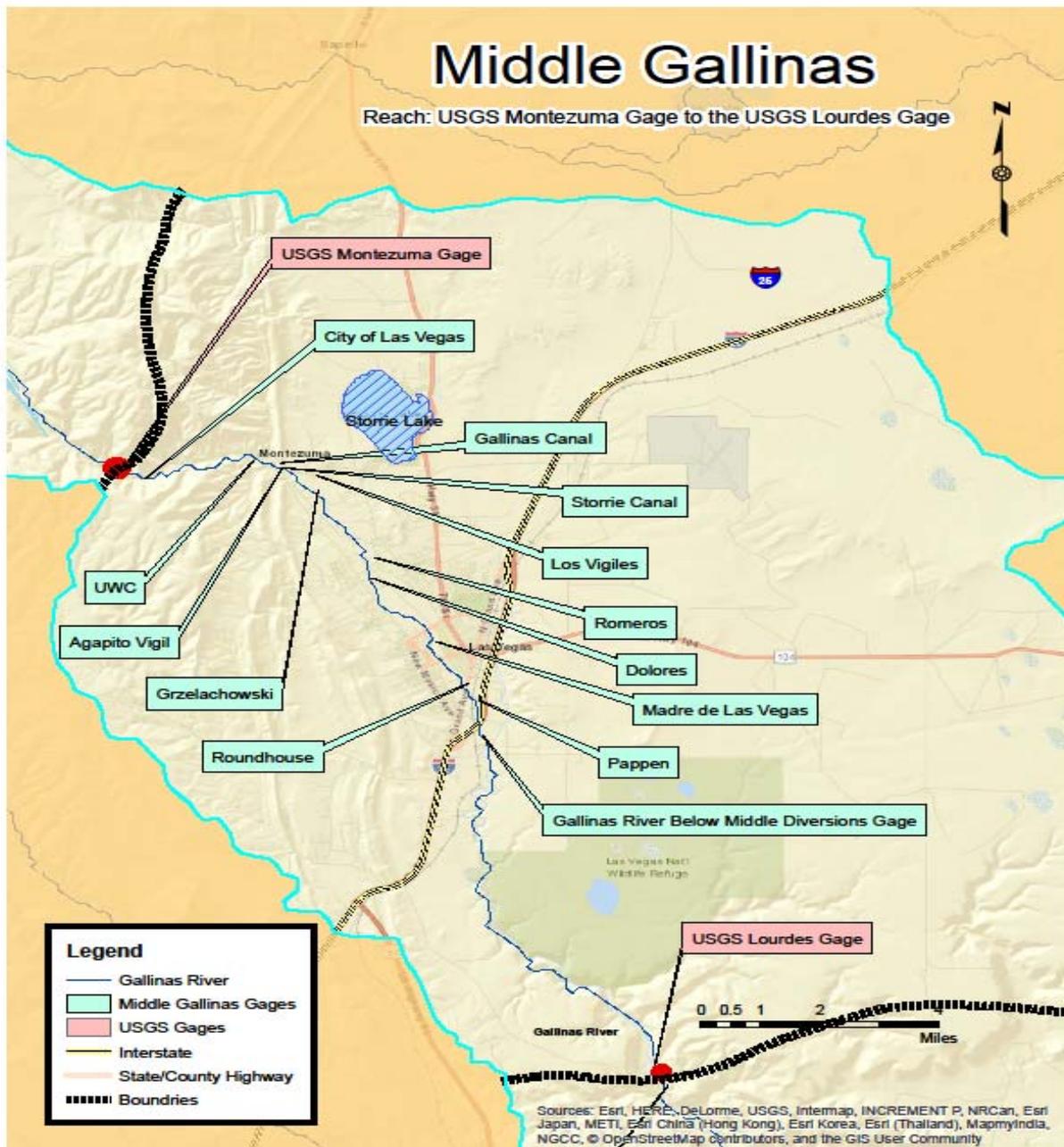


Figure 4

The total available water recorded by the USGS Montezuma Gage No. 08380500 (Figure 4) in the middle reach of the river in 2018 was **4191 af**. This station reported a total available flow of **2,340 af** between April 1 and October 31, 2018 in the same area. The SPWUA received **1,096 af** from the river in 2018. The city received a total of **1,557 af** from the river in 2018. The acequias combined diversion was **1,291 af** throughout the middle reach of the river in 2018.

The maximum amount of water required for all river users in the middle reach of the river is **29,329 af**, including the total combined storage for SPWUA and the city if the lake is completely empty. On December 31, 2018, the total amount of storage in Storrie Lake was reported at

10,523 af (Figure 7) for the city and SPWUA combined. Considering the city and SPWUA's remaining storage in the lake at the end of 2018, the total amount of water from the river required to fully satisfy all users was **18,806 af**, leaving a deficit of **14,615 af** in 2018.

The City of Las Vegas received a total delivery of **1,557 af** from the river at the adjudicated POD in 2018. This diversion amount resulted in **60%** of the total adjudicated annual diversion amount for the city and **37%** of the total available water delivery in the middle reach of the river in 2018. In addition, the city reported a total diversion of **364 af** from the Storrie Lake bulk water purchase in storage and **10.4 af** from the Taylor Well Field in 2018. Based on OSE metering information and the city's reported diversion amounts, their total combined diversion for 2018 was **1,913 af**. The city reported a total return flow into the river of **1,559 af** from their treatment facilities in 2018. The city is not subject to the PDR of 3.077 af/ac/an for the river acequias.

Montezuma Pipe Line/United World College (UWC river pump) has **8.0 acres** of irrigated land with a maximum adjudicated annual diversion amount of **3.0 af**. The UWC river pump is not subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. The UWC river pump received a total delivery of **2.98 af** from the river at the adjudicated POD during the 2018 irrigation season. This diversion amount resulted in **99.4%** of the total adjudicated diversion amount for the ditch and **<1%** of the total water delivery in the middle reach of the river in 2018. UWC notified the water master early in the 2018 irrigation season that their river pump meter had been installed. UWC submitted the required paperwork to the OSE to change out the damaged meter and began using the new meter in early 2018. UWC did an outstanding job in 2018 communicating with the water master and correctly accounting for all its usage in 2018.

Gallinas Canal Acequia (Gallinas Canal) has **774.23 acres** of irrigated land with a maximum adjudicated annual diversion amount of **2,404.74 af**. In addition, the Gallinas Canal has adjudicated ponds with an annual net evaporative loss of **14.58 AF**. Gallinas Canal is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. Gallinas Canal received a total delivery of **32.3 af** from the river at the adjudicated POD during the 2018 irrigation season. This diversion amount resulted in **<1%** of the total adjudicated diversion amount for the ditch and **<1%** of the total water delivery in the middle reach of the river in 2018.

SPWUA received a total delivery of **1,095.84 af** during 2018, satisfying **5.6%** of their total adjudicated storage amount and diverting **26%** of the total available water delivery in the middle reach of the river in 2018. Total storage in Storrie Lake, as of December 2018, is shown on the table for *Live Storage Capacities* (Figure 6). SPWUA is not subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias.

Acequia Agapito Vigil has **11.78 acres** of irrigated land with a maximum adjudicated annual diversion amount of **36.25 af**. Acequia Agapito Vigil is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. Acequia Agapito Vigil received water in 2018 but does not have an OSE meter installed on the ditch at this time.

Agapito Vigil (Noble river pump) has **2.1 acres** of irrigated land with a maximum adjudicated annual diversion amount of **2.1 af**. The Noble river pump is permitted as a second POD and is not subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias when diverting with the river pump. However, the Nobles also maintain the ability to divert from the Acequia Agapito Vigil and are subject to the PDR through this POD. The water master sent the second notice of violation to the Nobles reminding them that they are obligated under the permit Conditions of

Approval for their permitted river pump to have a meter on the pump and submit quarterly meter readings of their usage. To date, the water master has received no correspondence and no meter readings from the Nobles despite receiving a phone from Betty Noble in early 2018 assuring him they would become compliant immediately. **A third and final notice will be sent in 2019. Subsequent compliance action or permit cancellation by the OSE will follow the Nobles do not comply with the permit Conditions of Approval.**

Acequia Madre de Los Vigiles has **172.09 acres** of irrigated land with a maximum adjudicated annual diversion amount of **534.6 af**. In addition, the Acequia Madre de Los Vigiles has adjudicated ponds with an annual net evaporative loss of **3.30 af**. Acequia Madre de Los Vigiles is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. Acequia Madre de Los Vigiles received a total delivery of **352.53 af** from the river at the adjudicated POD during the 2018 irrigation season. This diversion resulted in **66%** of the total adjudicated diversion amount for the ditch and **~8.4%** of the total water delivery in the middle reach of the river in 2018. By contrast, the Acequia Madre de Los Vigiles over-diverted by 164% in 2017. The Mayordomo was responsive when called upon by the water master and did a very good job of communicating during the season.

Grezlachowski Ditch has **75.24 acres** of irrigated land with a maximum adjudicated annual diversion amount of **247.02 af**. In addition, the Grezlachowski Ditch has adjudicated ponds with a total surface area of **10.8 acres**. Grezlachowski Ditch is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. Grezlachowski Ditch received a total delivery of **253.26 af** from the river at the adjudicated POD during the 2018 irrigation season. This over-diversion resulted in **103%** of the total adjudicated diversion amount for the ditch and **~6.1%** of the total water delivery in the middle reach of the river in 2018. The water master assisted Mayordomo David Jones with the adjustment of the ditch headgate on several occasions in 2018 in an effort to stay within the guidelines of the rotation schedule. The water master and Mr. Jones will discuss the need for improved communication and responsiveness prior to the start of the irrigation season in 2019.

Acequia Madre de Los Romeros has **216.03 acres** of irrigated land with a maximum adjudicated annual diversion amount of **681.97 af**. In addition, Acequia Madre de Los Romeros has adjudicated ponds with an annual net evaporative loss of **11.22 af**. Acequia Madre de Los Romeros is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. Acequia Madre de Los Romeros received a total delivery of **196.12 af** from the river at the adjudicated POD in 2018. This diversion resulted in **29%** of the total adjudicated diversion amount for the ditch and **~4.6%** of the total water delivery in the middle reach of the river in 2018.

Acequia Nuestra Señora de los Dolores de Las Vegas has **25.65 acres** of irrigated land with a maximum adjudicated annual diversion amount of **81.69 af**. In addition, Acequia Nuestra Señora de los Dolores de Las Vegas has adjudicated ponds with an annual net evaporative loss of **1.8 acres**. Acequia Nuestra Señora de los Dolores de Las Vegas is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. Acequia Nuestra Señora de los Dolores de Las Vegas received a total delivery of **3.98 af** from the river at the adjudicated POD in 2018. This diversion resulted in **5%** of the total adjudicated diversion amount for the ditch and **<1%** of the total water delivery in the middle reach of the river in 2018. Communication between the State Health Department officials who manage the ditch and the water master remained very consistent in 2018.

Acequia Madre de Las Vegas has **77.91 acres** of irrigated land with a maximum adjudicated annual diversion amount of **242.5 af**. In addition, the Acequia Madre de Las Vegas has adjudicated ponds with a total surface area of **1.80 acres**. Acequia Madre de Las Vegas is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. Acequia Madre de Las Vegas received a total delivery of **203.49 af** from the river at the adjudicated POD in 2018. This diversion resulted in **84%** of the total adjudicated diversion amount for the ditch and **4.9%** of the total water delivery in the middle reach of the river in 2018. The water master contacted Mayordomo Gilbert Uliberri in the later part of the irrigation season informing him that the ditch was close to over-diverting. Mr. Uliberri minimized flow but requested a small amount continue to keep flowing to supply water for stock and ponds. As a result of the aforementioned leakage around the flume that was repaired in late 2018, the total diversion amount stated herein is less than actual.

Roundhouse Ditch has **129.51 acres** of irrigated land with a maximum adjudicated annual diversion amount of **398.64 af**. In addition, the Roundhouse Ditch has adjudicated ponds with a total surface area of **0.90 acres**. The Roundhouse Ditch is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. The Roundhouse Ditch received a total delivery of **224.47 af** from the river at the adjudicated POD up to October 2, 2018 when the measurement equipment was stolen from the station. This diversion resulted in **56%** of the total adjudicated diversion amount for the ditch and **5.3%** of the total water delivery in the middle reach of the river in 2018. The ditch diversions for the month of October were not recorded by the OSE and are not reflected in this report.

Pappen Ditch has **53.2 acres** of irrigated land with a maximum adjudicated annual diversion amount of **163.70 af**. The Pappen Ditch is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. The Pappen Ditch received a total delivery of **21.92 af** from the river at the adjudicated POD in 2018. This diversion resulted in **13%** of the total adjudicated diversion amount for the ditch and **<1%** of the total water delivery in the middle reach of the river in 2018. The ditch was blown out in the 2018 irrigation season from heavy rain in the area and did not flow most of the 2018 irrigation season.

Gallinas River - Lower Reach

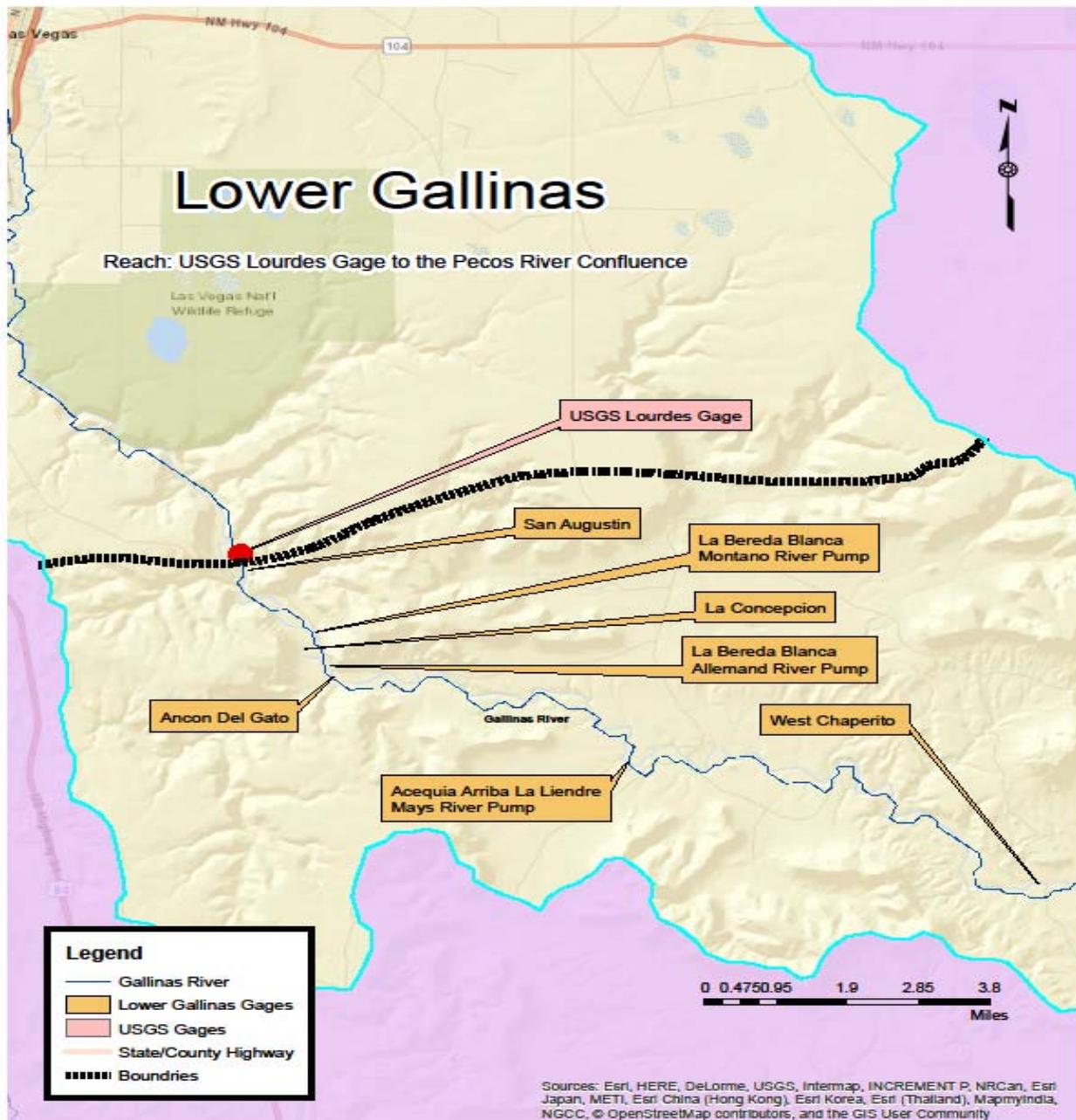


Figure 5

A total annual delivery of **3,457 af** was recorded in the lower reach of the river by the USGS Lourdes Gage No. 08382000 (Figure 5). This station reported an available flow of **3,085 af** between April 1, and October 31, 2018. The USGS Lourdes Gage is also used by the water master to monitor the return flows by the city. The city reported a total return flow back to the river of **1,559 af** from its water treatment facility. This return flow supplemented the total delivery recorded by the USGS Lourdes Gage No. 08382000 in 2018 and subsequently was capable of supplying the maximum diversion amount of **1,080 af** required for all river users in the lower reach of the river during the seven month irrigation period.

San Augustin Ditch has **73.14 acres** of irrigated land with a maximum adjudicated annual diversion amount of **225.05 af**. The San Augustin Ditch is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. The San Augustin Ditch received a total delivery of **1,116.21 af** from the river at the adjudicated POD in 2018. This **gross over-diversion resulted in 496%** of the total adjudicated diversion amount for the ditch and **32%** of the total water delivery in the lower reach of the river in 2018. The San Augustin Ditch over-diversions are represented in a graph (figure 6) demonstrating the misuse of water. The blue bars in the graph represent the actual amount of water used by the ditch during each month of the irrigation season in 2018. The red bars in the graph represent an estimated diversion amount of **32.15 af** the ditch could theoretically divert on a monthly basis and still remain within the annual adjudicated amount of water for the ditch. The difference between the blue bars and the red bars is the amount of water the ditch over-diverted each month. The average daily amount of water the San Augustin Ditch diverted during the irrigation season in 2018 was **5.30 af**. Using this daily average, the ditch should only be irrigating a total of 43 days during the irrigation season to avoid over-diversion. By contrast, the average amount of water consumed daily by all the acequias in the middle reach of the river **combined** (excluding the city and SPWUA) in 2018 was **5.98 af**. The San Augustin Ditch alone diverted **89%** of the total of the acequias combined diversions in the middle reach of the river in 2018.

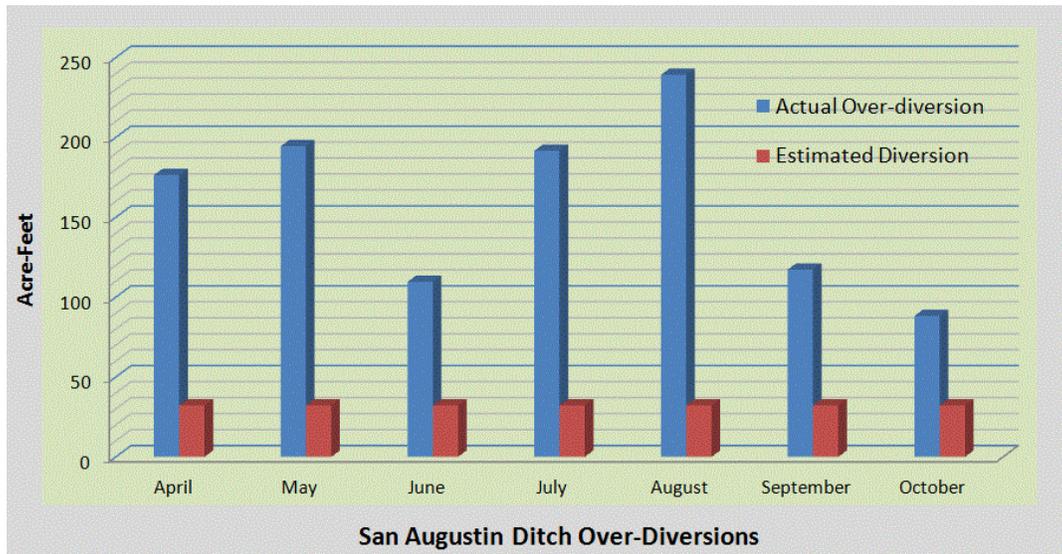


Figure 6

The water master spoke to Mayordomo Stacy Montañó on many occasions during the irrigation season informing him that the ditch was over-diverted. The Mayordomo made it clear to the water master that if the water was available, the ditch would be using it. The water master received no calls for water from users downstream of the San Augustin Ditch in 2018. However, the water master witnessed the ditch running on several occasions with no users on the ditch actually using the water. Allowing the San Augustin Ditch to run while not being beneficially used is a true example of ditch mismanagement and a waste of water. During an extremely dry irrigation season throughout the region, the ditch continually displayed practices contradictory to the conservation of water and demonstrated an irresponsible and unlawful example of leadership by a senior user.

La Bereda Blanca (Montano river pump) has **17.2 acres** of irrigated land with a maximum adjudicated annual diversion amount of **34.4 af**. The Montano river pump is not subject to the

PDR of 3.077 af/ac/an for the Gallinas River acequias. The Montano river pump was damaged by floodwater in late 2017 and did not divert any water in 2018.

La Bereda Blanca (Allemand river pump) has **66.13 acres** of irrigated land with a maximum adjudicated annual diversion amount of **132.26 af**. The Allemand river pump is not subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. The Allemand river pump received a total delivery of **47.43 af** from the river as recorded on the meter on the river pump. This diversion in 2018 resulted in **36%** of the total adjudicated diversion amount and **1.4%** of the total water delivery in the lower reach of the river in 2018. Archie Allemand has been continually working with the water master to complete requirements for the pond permit issued in 2017. He is doing a spectacular job of demonstrating excellent conservation of water with the sprinkler system he has been using to irrigate his crops. On October 30, 2018, Mr. Allemand received an OSE approved Extension of Time in Which to Perfect an Appropriation of Surface Water to complete the works on a 1.0 acre surface area permitted irrigation pond. Mr. Allemand informed the water master that construction on the pond is scheduled to begin in late 2018 or early 2019.

La Concepcion has **34.1 acres** of irrigated land with a maximum adjudicated annual diversion amount of **104.93 af**. La Concepcion is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. La Concepcion ditch and headgate were badly damaged by flood waters in late 2017 and remained in disrepair throughout the entirety of the 2018 irrigation season. Damian Lujan informed the water master that the ditch is in the process of obtaining funding for repairs.

Ancon Del Gato has **64.8 acres** of irrigated land with a maximum adjudicated annual diversion amount of **199.39 af**. The Ancon del Gato Ditch is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. Ancon del Gato headgate was damaged by floodwater that occurred in late 2017. No repairs were made to the headgate in 2018. The ditch received no water throughout the 2018 irrigation season.

West Chaperito has **106.5 acres** of irrigated land with a maximum adjudicated annual diversion amount of **327.7 af**. The West Chaperito Ditch is subject to the PDR of 3.077 af/ac/an for the Gallinas River acequias. The West Chaperito Ditch received a total delivery of **20.87 af** from the river at the adjudicated POD in 2018. This diversion was the result of monsoonal flooding captured by the ditch between April 1 and October 31, 2018. None of the necessary repairs were performed on the West Chaperito ditch in 2018.

2018 Gallinas River Voluntary Rotation Schedule

Implementaion of the the rotation schedule (Figure 7) for all users on the river was anticipated to begin April 1, 2018. Under normal circumstances the diversions by ten acequias, including the Noble river pump, the city of Las Vegas and the SPWUA, are affected by the rotation schedule. The rotation schedule did not take full effect until late in the season beyond the time when water was needed to irrigate, due to historically low flows in the river. The rotation schedule was suspended most of the irrigation season because of these low flows. There were only a few days where flows on the river were above 20.0 cfs, which also suspended the rotation schedule. According to the rotation schedule guidelines, when flows in the river are less than 4.0 cfs the city may divert either what is needed to maintain their demands or the entire river, whichever is less. In 2018, the parameters surrounding the 4.0 cfs guideline for the city were the standard and not the exception, painting a distinctly different picture than past irrigation seasons. The rotation schedule continued intermittently until the end of the irrigation season on October 31, 2018.



The upper Gallinas River going underground near Lower Canyon Road on July 5, 2018.

2018 Live Storage Capacities

2018 LIVE STORAGE CAPACITIES				
Measured in acre-feet	Storrie Lake*	Bradner Reservoir**	Peterson Reservoir**	City of Las Vegas Storage in Storrie Lake**
Month				
January	16,087.000		187.718	N/A
February	16,182.000		192.913	N/A
March	16,342.000		160.831	N/A
April	16,087.000		163.630	N/A
May	15,182.000		160.072	N/A
June	13,851.000		159.205	N/A
July	12,316.000		164.500	775.115
August	11,769.000		168.147	738.396
September	10,968.000		185.790	738.396
October	10,003.000		185.883	732.919
November	10,226.000		178.471	730.438
December	10,523.000		185.289	728.080
Monthly Average	13294.667		174.371	740.557
*	Data is provisional and subject to change. All data provided by Storrie Project Water Users Association.			
**	Data is provisional and subject to change. All data provided by the City of Las Vegas.			

Figure 7

SPWUA - The total live storage amount in Storrie Lake (Figure 7), as of December 31, 2018, according to SPWUA officials, was **10,523 af**. The remaining amount of available storage in Storrie Lake for use by SPWUA was **8,924 af**. SPWUA received a total delivery of **1,096 af** during 2018.

The City of Las Vegas - The city continued to use Peterson Reservoir in 2018 as its primary live storage (Figure 7). The city maintained an average storage amount of **174.371 af** in Peterson Reservoir during 2018. Additionally, the city applied for and obtained OSE Permit No. SP-341 to store water in Storrie Lake. The permit allows the storage of up to **2,300 af** in the lake. The permit decreases the adjudicated amount of storage for SPWUA in the lake from **21,747 af** to **19,447 af**. The original 21,747 af allowed for storage in Storrie Lake by SPWUA and the city combined was not increased as a result of OSE Permit No. SP-341.

Bradner Reservoir was out of service and not used by the city during 2018.

2018 USGS Gages on the Gallinas River

Administration of water by the water master in the Gallinas River Basin depends heavily upon information obtained from three of the USGS gauges on the river. The first gage is located above the adjudicated point of diversion for the city, in Montezuma, N.M. The Montezuma Gage #08380500 is used as a marker for the OSE which separates the upper and middle reaches of the river. The Montezuma gage can be affected by ice in the winter months yielding infrequent and sometimes unreliable readings. The Lourdes Gage #08382000 is located upstream of the San Augustine Ditch point of diversion, near the village of San Augustin, N.M. This gage is also used as a marker by the OSE to separate the middle and lower reaches of the river. The Lourdes gage is operated by the USGS seasonally and does not show any information during portions of the winter months. The USGS Colonias Gage #08382500 is located upstream from the confluence of the Gallinas and Pecos Rivers near the Village of Colonias, N.M. This gage is used to determine the amount of water leaving the Gallinas River.

2018 USGS GAGES			
Measured in acre-feet	USGS Montezuma*	USGS Lourdes*	USGS Colonias*
Month			
January**	297.465	0.000	66.070
February**	271.581	82.674	1.190
March	233.339	149.615	0.000
April	171.652	199.163	0.000
May	130.018	199.778	492.880
June	69.899	67.915	0.000
July	106.871	1672.943	2961.703
August	530.110	422.247	952.199
September	563.631	180.042	870.637
October	767.710	343.225	698.827
November	660.367	139.004	91.539
December**	387.913	0.000	8.113
Totals	4190.556	3456.606	6143.158
* Data is provisional and subject to change. All data provided by USGS.			
** Ice affected.			

Figure 8

2018 Gallinas River Basin Annual Snowpack*

Date	Snow Water Equivalent (in) Start of Month Values	Change In Snow Water Equivalent (in)	Snow Depth (in) Start of Month Values	Change In Snow Depth (in)
Jan-18	0		0	
Feb-18	0.5	0.5	1	1
Mar-18	1.7	1.2	5	4
Apr-18	0	-1.7	0	-5
May-18	0	0	0	0
Jun-18	0	0	0	0
Jul-18	0	0	0	0
Aug-18	0	0	0	0
Sep-18	0	0	0	0
Oct-18	0	0	0	0
Nov-18	1.6	1.6	11	11
Dec-18	3	1.4	12	1

Figure 9

The Wesner Springs SNOTEL station #854 (Figure 9) is located on Wesner Peak above the Gallinas River Watershed and operated by the National Oceanic and Atmospheric Administration (NOAA) to record area snowpack and other data. This gage is used by area stakeholders as well as the water master to gauge the amount of snow above the watershed and the potential runoff snow melt in the spring. The recorded snowpack in 2018 at Wesner Springs was one of the lowest on record for the gage. The annual snowpack, as shown by the 2018 SNOTEL data (Figure 9) that regularly provides a sufficient runoff in the early spring for area farmers on the river, was nearly non-existent in 2018.

* All data provided by the National Oceanic and Atmospheric Administration and is subject to change

2018 Gallinas River Basin Annual Precipitation (inches)*

Date	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
1								0.01	0.36				0.37
2									0.05	0.04			0.09
3						0.19		0.08	0.36				0.63
4									0.23				0.23
5							2.50		0.01				2.51
6							0.01	0.39	0.02	0.01			0.43
7							0.01		0.02	0.02			0.05
8								0.07			0.01	0.01	0.09
9									0.73	0.19			0.92
10		0.01						0.46					0.47
11		0.15					0.06				0.08		0.29
12											0.01		0.01
13						0.04	0.35						0.39
14							0.03	0.71		0.12			0.86
15			0.03		0.01		0.04	0.57		0.01			0.66
16						0.04	0.01			0.03			0.08
17								0.03		0.20			0.23
18										0.09			0.09
19		0.03							0.49				0.52
20				0.25			0.01		0.07				0.33
21					0.06			0.09					0.15
22					0.03			0.66					0.69
23					0.01		2.41			1.17			3.59
24							0.83	0.09		0.81			1.73
25							0.01		0.35				0.36
26							0.08					0.34	0.42
27			0.17										0.17
28				0.04								0.31	0.35
29							0.03						0.03
30							0.12			0.34			0.46
31								0.09		0.30			0.39
Totals	0.00	0.19	0.20	0.29	0.11	0.27	6.50	3.25	2.69	3.33	0.10	0.66	17.59
*Monthly Average**	0.33	0.36	0.57	0.80	1.58	1.79	3.08	3.39	2.00	1.27	0.56	0.50	16.06
Difference	-0.33	-0.17	-0.37	-0.51	-1.47	-1.52	+3.42	-0.14	+0.69	+2.06	+0.46	+0.16	+1.53

Figure 10

2018 Irrigation Season Precipitation

60 Days

16.44 Inches

2018 Total Precipitation

69 Days

17.59 Inches

* All data provided by the National Oceanic and Atmospheric Administration and is provisional and subject to change

** Monthly precipitation average from November 1940 to December 2018.

Summary

This report summarizes activities for the 2018 water year on the Gallinas River and is for informational purposes only. This report does not suggest, validate or establish a water right and is not binding on the State of New Mexico or the State Engineer in any adjudication or administrative proceeding.

As shown throughout this report, the Gallinas River Basin suffered dramatically from the drought in 2018. The economic damage and environmental impacts to the area's water table, vegetation, livestock and stream course in early 2018, will take years to repair. Conversely, the higher-than-normal July 2018 precipitation average (Figure 10) was mostly the result of short term heavy downpours, often times with hail, that produced flooding and damage to vegetation. Although the reported annual precipitation total reported by NOAA at the Las Vegas Airport (Figure 10) was above average, the majority of the accumulated precipitation occurred well beyond the time to plant crops and therefore was of no assistance to area farmers and the growth of their crops. Fortunately, a very well timed permit for storage in Storrie Lake and the acquisition of water from SPWUA assisted the city in what might have otherwise been a very trying time for them. Storrie Lake was at an above average level (Figure 7) to start the 2018 irrigation season allowing SPWUA stakeholders ample water to irrigate their crops during the season.

A peek into the 2019 irrigation season has already shown that a higher snowpack average at Wesner Springs is present in early January 2019 than was seen in all of 2018. This will help the river, its area farmers and stakeholders as well as the surrounding habitat to begin recovery however the damage done in early to mid-2018 will take years for the river to fully recover from.

**2018 GALLINAS RIVER VOLUNTARY ROTATION SCHEDULE
(USGS Montezuma Gage to OSE Gallinas River below Middle Diversions)**

The provisions set forth below, including the rotation schedule, are intended to serve as guidelines for Gallinas River users in the middle reach. The Water Master administers public waters based on the principle of maximizing beneficial use with equitable distribution by priority.

The 2018 rotation schedule will apply for flows between 4 and 20 cubic feet per second (cfs), as measured at the USGS Montezuma Gage.

General Provisions:

- The 2018 irrigation season rotation schedule will start on anticipated start on April 1, 2018.
- The 2018 irrigation season rotation schedule will end on October 31, 2018.
- The OSE will administer direct diversions to acequias and ditches, based on the Project Diversion Requirement (PDR) of **3.077** acre-feet per acre per year.
- Available river flow will be determined by the **8:00 a.m.** reading at USGS Montezuma Gage. Flow and diversion information may be accessed at: <http://meas.ose.state.nm.us/district6.jsp>
- During the irrigation season, the Water Master will adjust the OSE Gallinas River Weir at Storrie to satisfy senior user needs and provide residual flow (including storm events) to Storrie Project Water Users Association (SPWUA). The Water Master will modify available flow to all users, based on field observations of beneficial use and data collected by OSE staff.
- Scheduled days may be traded among users, with all rotations starting/stopping at 8:00 a.m.
- The rotation schedule will suspend at flows **below 4 cfs and greater than 20 cfs**. The rotation schedule resumes at flows **between 4 and 20 cfs**, with no schedule changes.

SPWUA and Gallinas Canal Water Storage & Irrigation Company (GCWSIC) Rotation Notes:

- SPWUA may divert **flow as needed** for flow **greater than 20 cfs**, and residual flow administered by the Water Master for flows **less than 20 cfs**.
- GCWSIC may divert **flow as needed** at flows **greater than 15 cfs**, and residual flow administered by the Water Master at flows **less than 15 cfs**.

Acequias, Ditches and River Pump Rotation Notes:

- Acequias, ditches and river pumps may divert **flow as needed** at flows from **0 to less than 15 cfs**, on a **7-day schedule (7 days on, 7 days off)** based on the group chart below.
- Acequias, ditches and river pumps may divert **flow as needed** at flows **greater than 15 cfs**.

GROUP A (7 days on, 7 days off)	GROUP B (7 days on, 7 days off)
Acequia Madre de Los Vigiles Acequia Madre de Las Vegas Nuestra Señora de Los Dolores Pappen Ditch	Acequia Madre de Los Romeros Grzelachowski Ditch Acequia Agapito Vigil Noble & UWC River Pumps Roundhouse Ditch

City of Las Vegas (COLV) Rotation Notes:

- The COLV may divert **all available flow less than 4 cfs**.
- The COLV may divert a flow of **1.5 cfs** for flow from **4 to less than 7 cfs**, with no rotation.
- The COLV may divert a flow of **3.5 cfs** for flow from **7 to less than 10 cfs**, on a **3-day schedule (3 days on, 3 days off)**.
- The COLV may divert a flow of **4.5 cfs** for flow from **10 to less than 15 cfs**, on a **3-day schedule (3 days on, 3 days off)**.

Please direct any concerns regarding water rights management along the Gallinas River to: Christopher M. Thornburg, District VI Water Master, at **505-629-8978**.

April 2018

April 2018							May 2018						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25	26	27	28
29	30						31						

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Apr 1	2	3	4	5	6	7
	COLV			Group B		COLV
8	9	10	11	12	13	14
	Group B COLV			Group A		COLV
15	16	17	18	19	20	21
	Group A COLV			Group B		COLV
22	23	24	25	26	27	28
	Group B			Group A		COLV
29	30	May 1	2	3	4	5
	Group A					

Apr 1 - 7

Apr 8 - 14

Apr 15 - 21

Apr 22 - 28

Apr 29 - May 5

Thornburg, Christopher, OSE

May 2018

May 2018							June 2018						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
6	7	1	2	3	4	5	3	4	5	6	7	8	9
13	14	15	16	17	18	19	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28	29	30

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Apr 29	30	May 1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	Jun 1	2

Group A: May 14, 21, 28, 4 Jun 4, 11, 18, 25, 2 Jun 18, 25, 2 Jun 18, 25, 2
 Group B: May 7, 14, 21, 28, 4 Jun 4, 11, 18, 25, 2 Jun 18, 25, 2
 COLV: May 1, 8, 15, 22, 29, 5 Jun 5, 12, 19, 26, 3 Jun 12, 19, 26, 3

June 2018

June 2018							July 2018						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
3	4	5	6	7	8	9	1	2	3	4	5	6	7
10	11	12	13	14	15	16	8	9	10	11	12	13	14
17	18	19	20	21	22	23	15	16	17	18	19	20	21
24	25	26	27	28	29	30	22	23	24	25	26	27	28
							29	30	31				

May 27	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	31	Jun 1	2	
3	4	5	6	7	8	9
	Group B			Group A		
				COLV		
10	11	12	13	14	15	16
	Group A					
				COLV		
17	18	19	20	21	22	23
	Group B					
				Group A		
				COLV		
24	25	26	27	28	29	30
	Group A					
				Group B		
				COLV		
						To Jul 2
						COLV

July 2018

Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
Jul 1	2	3	4	5	6	7							
Jul 1 - 7	Group B COLV				Group A				Group A				COLV
8	9	10	11	12	13	14							
Jul 8 - 14	Group A COLV				Group B				Group B				COLV
15	16	17	18	19	20	21							
Jul 15 - 21	Group B				Group A				Group A				COLV
22	23	24	25	26	27	28							
Jul 22 - 28	Group A				Group B				Group B				COLV
29	30	31	Aug 1	2	3	4							
Jul 29 - Aug 4	Group B COLV		Group A										

Thornburg, Christopher, OSE 4 3/1/2018 10:01 AM

August 2018

August 2018							September 2018						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
5	6	7	8	9	10	11	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29
							30						

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Jul 29	30	31	Aug 1	2	3	4	
Jul 29 - Aug 4			COLV	COLV	Group A		
5	6	7	8	9	10	11	
Aug 5 - 11	Group A	COLV			Group B		COLV
12	13	14	15	16	17	18	
Aug 12 - 18	Group B	COLV			Group A		COLV
19	20	21	22	23	24	25	
Aug 19 - 25	Group A	COLV			Group B		COLV
26	27	28	29	30	31	Sep 1	
Aug 26 - Sep 1	Group B		Group A		COLV		To Sep 3 ↕

Thornburg, Christopher, OSE

September 2018

		September 2018							October 2018						
		Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
Aug 26	Sunday	27	28	29	30	31	Sep 1	Sep 1	2	3	4	5	6	7	
2	Monday	Group A							7	8	9	10	11	12	
3	Tuesday								14	15	16	17	18	19	
4	Wednesday								21	22	23	24	25	26	
5	Thursday								28	29	30	Oct 1	2	3	
6	Friday								3	4	5	6	7	8	
7	Saturday								10	11	12	13	14	15	
8	Sunday								17	18	19	20	21	22	
9	Monday	Group B							24	25	26	27	28	29	
10	Tuesday								31	1	2	3	4	5	
11	Wednesday								8	9	10	11	12	13	
12	Thursday								15	16	17	18	19	20	
13	Friday								22	23	24	25	26	27	
14	Saturday								29	30	Oct 1	2	3	4	
15	Sunday								3	4	5	6	7	8	
16	Monday	Group A							10	11	12	13	14	15	
17	Tuesday								17	18	19	20	21	22	
18	Wednesday								24	25	26	27	28	29	
19	Thursday								31	1	2	3	4	5	
20	Friday								8	9	10	11	12	13	
21	Saturday								15	16	17	18	19	20	
22	Sunday								22	23	24	25	26	27	
23	Monday	Group B							29	30	Oct 1	2	3	4	
24	Tuesday								3	4	5	6	7	8	
25	Wednesday								10	11	12	13	14	15	
26	Thursday								17	18	19	20	21	22	
27	Friday								24	25	26	27	28	29	
28	Saturday								31	1	2	3	4	5	
29	Sunday								8	9	10	11	12	13	
30	Monday	Group A							15	16	17	18	19	20	
31	Tuesday								22	23	24	25	26	27	
9/30 - 10/5	Wednesday								29	30	Oct 1	2	3	4	

Thornburg, Christopher, OSE 6 3/1/2018 10:01 AM

October 2018

October 2018							November 2018						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6		7	8	9	10	11	12	13
14	15	16	17	18	19	20	21	22	23	24	25	26	27
28	29	30	31				28	29	30	31			

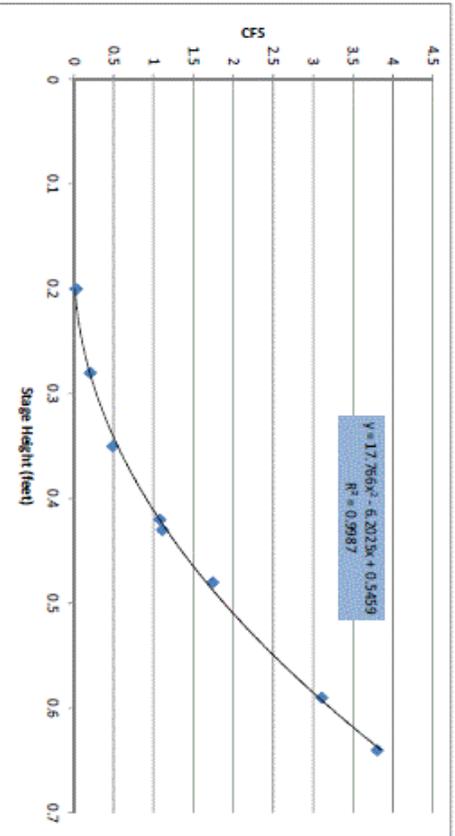
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Sep 30	Oct 1 Group A	2 Group B	3	4 Group B	5 COLV	6
7 Group B	8 Group A	9 Group B	10 Group A	11 Group A	12 COLV	13
14 Group A	15 Group A	16 Group B	17 COLV	18 Group B	19 COLV	20
21 Group B	22 Group B	23 Group A	24 Group A	25 Group A	26 Group A	27
28 Group A	29 Group A	30 Group A	31 Group B	Nov 1 Group B	2 Group A	3

Thornburg, Christopher, OSE 7 3/1/2018 10:01 AM

Gallinas River Below Middle Diversions

STAGE	CFS	STAGE	CFS	STAGE	CFS	STAGE	CFS	STAGE	CFS	STAGE	CFS	STAGE	CFS
0.01	0.0000	0.31	0.3304	0.61	3.3731	0.91	9.6136	1.21	19.0251	1.51	31.6884	1.81	47.5226
0.02	0.0000	0.32	0.3803	0.62	3.5296	0.92	9.8767	1.22	19.4218	1.52	32.1647	1.82	48.1054
0.03	0.0000	0.33	0.4338	0.63	3.6897	0.93	10.1434	1.23	19.7950	1.53	32.6445	1.83	48.6919
0.04	0.0000	0.34	0.4908	0.64	3.8533	0.94	10.4136	1.24	20.1718	1.54	33.1279	1.84	49.2819
0.05	0.0000	0.35	0.5514	0.65	4.0204	0.95	10.6873	1.25	20.5522	1.55	33.6148	1.85	49.8754
0.06	0.0000	0.36	0.6155	0.66	4.1911	0.96	10.9646	1.26	20.9361	1.56	34.1053	1.86	50.4725
0.07	0.0000	0.37	0.6831	0.67	4.3654	0.97	11.2455	1.27	21.3235	1.57	34.5994	1.87	51.0732
0.08	0.0000	0.38	0.7544	0.68	4.5432	0.98	11.5299	1.28	21.7145	1.58	35.0970	1.88	51.6774
0.09	0.0000	0.39	0.8291	0.69	4.7246	0.99	11.8179	1.29	22.1091	1.59	35.5981	1.89	52.2851
0.10	0.0000	0.40	0.9075	0.70	4.9095	1.00	12.1094	1.30	22.5072	1.60	36.1029	1.90	52.8964
0.11	0.0000	0.41	0.9893	0.71	5.0980	1.01	12.4045	1.31	22.9089	1.61	36.6111	1.91	53.5113
0.12	0.0000	0.42	1.0748	0.72	5.2900	1.02	12.7031	1.32	23.3141	1.62	37.1229	1.92	54.1297
0.13	0.0000	0.43	1.1638	0.73	5.4856	1.03	13.0053	1.33	23.7229	1.63	37.6383	1.93	54.7516
0.14	0.0000	0.44	1.2563	0.74	5.6847	1.04	13.3110	1.34	24.1352	1.64	38.1572	1.94	55.3772
0.15	0.0000	0.45	1.3524	0.75	5.8874	1.05	13.6203	1.35	24.5511	1.65	38.6797	1.95	56.0062
0.16	0.0000	0.46	1.4520	0.76	6.0936	1.06	13.9331	1.36	24.9705	1.66	39.2057	1.96	56.6389
0.17	0.0049	0.47	1.5552	0.77	6.3034	1.07	14.2495	1.37	25.3935	1.67	39.7353	1.97	57.2750
0.18	0.0051	0.48	1.6620	0.78	6.5168	1.08	14.5695	1.38	25.8200	1.68	40.2685	1.98	57.9148
0.19	0.0088	0.49	1.7723	0.79	6.7337	1.09	14.8930	1.39	26.2501	1.69	40.8051	1.99	58.5581
0.20	0.0160	0.50	1.8862	0.80	6.9541	1.10	15.2200	1.40	26.6838	1.70	41.3454	2.00	59.2049
0.21	0.0269	0.51	2.0036	0.81	7.1781	1.11	15.5566	1.41	27.1210	1.71	41.8892	2.01	59.8553
0.22	0.0412	0.52	2.1245	0.82	7.4057	1.12	15.8848	1.42	27.5617	1.72	42.4365	2.02	60.5092
0.23	0.0591	0.53	2.2490	0.83	7.6368	1.13	16.2225	1.43	28.0060	1.73	42.9874	2.03	61.1667
0.24	0.0806	0.54	2.3771	0.84	7.8715	1.14	16.5637	1.44	28.4539	1.74	43.5419	2.04	61.8278
0.25	0.1057	0.55	2.5087	0.85	8.1097	1.15	16.9086	1.45	28.9053	1.75	44.0999	2.05	62.4924
0.26	0.1342	0.56	2.6439	0.86	8.3515	1.16	17.2569	1.46	29.3603	1.76	44.6615	2.06	63.1605
0.27	0.1664	0.57	2.7826	0.87	8.5968	1.17	17.6089	1.47	29.8188	1.77	45.2266	2.07	63.8323
0.28	0.2021	0.58	2.9249	0.88	8.8457	1.18	17.9643	1.48	30.2808	1.78	45.7952	2.08	64.5075
0.29	0.2413	0.59	3.0708	0.89	9.0981	1.19	18.3234	1.49	30.7465	1.79	46.3675	2.09	65.1863
0.30	0.2841	0.60	3.2202	0.90	9.3541	1.20	18.6859	1.50	31.2157	1.80	46.9432	2.10	65.8687

Manual Measurements		
6/25/2018	0.2	0.035
6/4/2018	0.28	0.21
06/24/16	0.35	0.492
07/01/16	0.42	1.082
07/08/16	0.43	1.112
08/04/16	0.48	1.745
08/10/16	0.59	3.111
08/08/16	0.64	3.807



FIFTH JUDICIAL DISTRICT COURT
CHAVES COUNTY, N.M.
FILED IN MY OFFICE

2014 APR 21 PM 4:24

KENNETH CROWHURST
DISTRICT COURT CLERK

FIFTH JUDICIAL DISTRICT
COUNTY OF CHAVES
STATE OF NEW MEXICO

Nos. 20294 and 22600
Consolidated

STATE OF NEW MEXICO, *ex rel.*
STATE ENGINEER
and PECOS VALLEY ARTESIAN
CONSERVANCY DISTRICT,
Plaintiffs,

Hon. James J. Wechsler
Presiding Judge

Gallinas River Section

v.

L.T. LEWIS, *et al.*, and
THE UNITED STATES OF
AMERICA,
Defendants.

Court No. CV-WB-01-01

ORDER ON PROJECT DIVERSION REQUIREMENTS

THIS matter comes before the Court on the Joint Motion for Order on Project Diversion Requirements filed by the parties to the Case Management and Scheduling Order (June 13, 2013); State of New Mexico, *ex rel.* State Engineer (State), the City of Las Vegas (City), the United States of America, on behalf of the United States Fish and Wildlife Service (United States), the Storrie Project Water Users Association (Storrie), the Gallinas Canal Company (Gallinas Canal), and specified Acequias¹ of the Rio de las Gallinas Acequia Association (Acequias). The Court finds that:

1. On March 13, 2012, this Court entered the Amended Order Granting in Part and Denying in Part the State of New Mexico's Motion to Dismiss the Claims of Thirteen Acequias or

¹ Upper Maestas Ditch, Placita Arriba Ditch, El Porvenir Ditch, Agapito Vigil Acequia, Acequia Madre de los Vigiles, Acequia Madre de los Romeros, Acequia Madre de Las Vegas, Grzelachowski Ditch, Roundhouse Ditch, San Augustine Ditch, and La Concepcion Ditch

- Community Ditches (Amended Order on Acequias' Claims), wherein the Court referred to the Special Master for determination the issues of 1.) the amount of water the Acequias may divert on behalf of their members; and 2.) the resolution of the Acequias' members' claims for water related to conveyance losses, hydraulic pressure, and flushing of silt.
2. On April 24, 2013, the State, City, United States, Storrie, Gallinas Canal, and Acequias ("Parties") submitted a Joint Status Report and Joint Motion for Approval of Proposed Case Management Plan and Scheduling Order, that stipulated to undisputed and disputed issues of fact, and proposed a schedule for resolution of the issues referred to the Special Master in the Amended Order on Acequias' Claims.
 3. On June 13, 2013, this Court entered the Case Management and Scheduling Order, adopting the Parties' description of the issues and setting the matter for trial in November, 2013. That trial setting was later vacated and rescheduled for February, 2014.
 4. On February 13, 2014, the Special Master entered the Pretrial Order for Project Diversion Requirements Trial, which stated the undisputed and disputed facts stipulated by the Parties and set the trial to begin on February 18, 2014.
 5. On February 17, 2014, upon the Parties' submission to the Special Master of their stipulation resolving all disputed issues, the Special Master vacated the trial setting.

WHEREFORE, based on the stipulation of the Parties, approved by the Special Master, and being otherwise fully apprised, this Court orders that:

1. For all rights to the surface water of the Gallinas River delivered by a ditch, the off-farm conveyance efficiency factor (OFCE) is .65 or 65%.
2. The project diversion requirement (PDR) for all such irrigation rights shall be 3.077 acre-feet per acre per year, calculated as follows:

$$\text{PDR} = \frac{2.0 \text{ af/acre/year}}{\text{OFCE}}$$

3. The maximum annual diversion amount shall be calculated using the agreed OFCE

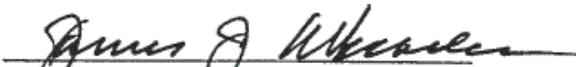
(above), calculated as follows:

$$\text{Maximum annual Diversion amount} = \text{PDR} \times \text{number of water right acres} + \frac{\text{Total amount of adjudicated non-irrigation water rights}}{\text{OFCE}}$$

4. The maximum annual diversion amount describes the maximum amount of water that may be diverted into a ditch for all purposes, including beneficial uses historically related to the maintenance and proper functioning of the conveyance system and for livestock and domestic uses.

5. The undersigned parties agree that this Order on Project Diversion Requirements resolves all disputed PDR and Maximum Annual Diversion issues set forth on page 9, paragraphs 1-4 of the Case Management and Scheduling Order filed June 13, 2013.

IT IS SO ORDERED.


Hon. James J. Wechsler

Approved by:


Stephen E. Snyder, Special Master

Submitted by:


DANIEL A. SANCHEZ
Rio Gallinas Specified Ditches



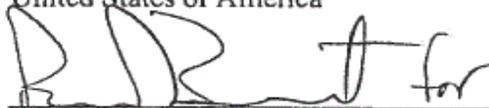
CYNTHIA SULLY
State of New Mexico



PAUL KASTLER
Storrie Project Water Users Association



BRUCE D. BERNARD
United States of America



TIMOTHY W. FOSTER
City of Las Vegas



MICHELLE HENRIE
Gallinas Canal Acequia Association

72-3-1. [Water districts; creation; change; subdistricts.]

The state engineer shall, from time to time, as may be necessary for the economical and satisfactory apportionment of water, divide the state in conformity with the drainage areas into water districts to be designated by names, and to comprise as far as possible one or more distinct stream systems in each district. Districts may be changed from time to time as may, in his opinion, be necessary for the economical and satisfactory apportionment of water. Provided, that the state engineer may, when in his opinion it shall be for the best interests of the state and the owners of water rights upon any stream system within the state of New Mexico, divide said stream system into subdistricts, each of which said subdistricts shall be designated by a distinct name.

History: Laws 1907, ch. 49, § 13; Code 1915, § 5666; Laws 1919, ch. 131, § 2; C.S. 1929, § 151-113; 1941 Comp., § 77-301; 1953 Comp., § 75-3-1.

72-3-2. Water masters; appointment; removal; duties.

- A. The state engineer shall, upon the written application of a majority of the water rights owners of any district in this state, appoint a water master for such district in the state, who may, for cause, be removed by the state engineer and shall be removed upon a petition of a majority of the water rights owners of the district. The water master shall have immediate charge of the apportionment of waters in the water master's district under the general supervision of the state engineer, and the water master shall so appropriate, regulate and control the waters of the district as will prevent waste. The state engineer may, if in the state engineer's opinion the public safety or interests of water users in any district in the state require it, appoint such water master for temporary or permanent service in such district in the absence of the application above provided for in this article.
- B. In instances where the state engineer's appointment of a water master is not in response to a written application of a majority of the water rights owners of a district, the provisions of Section 72-3-4 NMSA 1978 shall not apply.

History: Laws 1907, ch. 49, § 14; Code 1915, § 5667; C.S. 1929, § 151-114; 1941 Comp., § 77-302; 1953 Comp., § 75-3-2; 2007, ch. 157, § 1.

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 26 SURFACE WATER
PART 11 DECLARATION OF THE GALLINAS RIVER WATER SUB-DISTRICT OF THE PECOS RIVER STREAM SYSTEM

19.26.11.1 ISSUING AGENCY: Office of State Engineer ("OSE").
[19.26.11.1 NMAC - N, 8/29/03]

19.26.11.2 SCOPE: This rule applies to all waters of the Gallinas river located in San Miguel and Guadalupe counties, state of New Mexico.
[19.26.11.2 NMAC - N, 8/29/03]

19.26.11.3 STATUTORY AUTHORITY:

A. Section 72-2-8 NMSA (1997 Repl.) authorizes the OSE to develop, adopt, and promulgate all rules necessary to implement and administer the provisions of the Water Code.

B. New Mexico law declares that all natural water flowing in streams and watercourses, whether such be perennial, or torrential, within the limits of the state of New Mexico, belong to the public and are subject to appropriation for beneficial use. NMSA 1978, Section 72-1-1 (1907).

C. The state engineer has a statutory duty to provide general supervision of waters of the state and of the measurement, appropriation, distribution thereof and such other duties as required. NMSA 1978, Section 72-2-1 (1907).

D. The state engineer has the responsibility for appropriation of the state's waters in accordance with the laws of the state. NMSA 1978, Section 72-2-1 (1907); Const. Art. XVI, Section 2.

E. The state engineer is authorized to establish water districts upon any stream system within the state of New Mexico as necessary for the economical and satisfactory apportionment of said waters. NMSA 1978, Section 72-3-1 (1907).

F. The state engineer is authorized to divide a stream system into sub-districts, each of which said sub-district shall be designated by a distinct name. NMSA 1978, Section 72-3-1 (1907).

G. The state engineer is authorized, if in his opinion it is in the interest of public safety or the best interest of water users in a water district, to appoint a water master who shall have immediate charge of the apportionment of waters in his district under the general supervision of the state engineer, and shall so appropriate, regulate and control the waters of such water districts so as to prevent waste. NMSA 1978, Section 72-3-2 (1907).
[19.26.11.3 NMAC - N, 8/29/03]

19.26.11.4 DURATION: Permanent.
[19.26.11.4 NMAC - N, 8/29/03]

19.26.11.5 EFFECTIVE DATE: August 29, 2003, unless a later date is cited at the end of a section.
[19.26.11.5 NMAC - N, 8/29/03]

19.26.11.6 OBJECTIVE: The objective of this rule is to declare the Gallinas River Water Sub-District of the Pecos River Stream System and to appoint a water master who will have immediate charge of such apportionment of such waters of the Gallinas river.
[19.26.11.6 NMAC - N, 8/29/03]

19.26.11.7 DEFINITIONS: [RESERVED]
[19.26.11.7 NMAC - N, 8/29/03]

19.26.11.8 FINDINGS OF FACT:

A. The United States district court for the district of New Mexico handed down a decree on May 9, 1933 entitled "The United States of America, Plaintiff, vs. Hope Community Ditch, et al., Defendants, No. 712 Equity," defining the rights of several parties to the use of water along the Pecos river in New Mexico and some of its tributaries, among which is the Gallinas river.

B. On May 6, 1935, said court relinquished jurisdiction of said case to the state engineer.

- C. In order to properly apportion the waters of the Gallinas river in San Miguel and Guadalupe counties, New Mexico, the establishment of a water sub-district for those waters and the appointment of a water master in and for said water sub-district of the Pecos river water district is necessary.
- D. The amount of water flowing in the Gallinas river is finite and varies year to year based on annual spring run-off, which is dependent on annual precipitation.
- E. The city of Las Vegas, numerous acequia associations ("acequias"), Gallinas canal storage and irrigation company, and Storrie project water user's association ("Storrie project") are all water users of the Gallinas river.
- F. Adjudication of water rights along the Gallinas river has not been completed.
- G. Recent droughts in the state of New Mexico have created a water shortage crisis in the Pecos river stream system, including the Gallinas river.
- H. The shortage of water on the Gallinas river is a problem affecting the citizens of San Miguel and Guadalupe counties.
- I. By letter dated March 19, 2003, Storrie project requested that the state engineer administer the water in the Gallinas river.
- J. By letter facsimiled May 19, 2003, several acequias requested that the state engineer administer the water in the Gallinas river.
- K. On January 20, 1956, the Pecos river water district was declared by the state engineer.
- L. Creation of a water sub-district and appointment of a water master for the Gallinas river is needed to ensure public safety and that the interests of each water user are protected so that they receive the water to which they are entitled.

[19.26.11.8 NMAC - N, 8/29/03]

19.26.11.9 CONCLUSIONS OF LAW:

- A. Water sub-district creation and appointment of water master**
 - (1) The state engineer concludes that in the interest of public safety and in the interest of water users, the GALLINAS RIVER WATER SUB-DISTRICT should be formed and a water master appointed on a permanent basis, so as to administer the waters of the Gallinas river, a tributary of the Pecos river stream system, in accordance with New Mexico law.
 - (2) The GALLINAS RIVER WATER SUB-DISTRICT water master shall have immediate charge of the apportionment of waters in the water sub-district under the general supervision of the state engineer, and shall appropriate, regulate and control the waters of the water sub-district so as to prevent waste.
- B. Administration of affected water rights**
 - (1) The state engineer concludes that the immediate administration of water rights on the Gallinas river is necessary for the protection of the public, protection of prior water rights, and the prevention of waste.
 - (2) The state engineer concludes that the water master of the water sub-district created by this rule shall apportion the waters of the sub-district in accordance with the guidelines, existing or future regulations, manuals, directions, and supervision provided by the state engineer.
 - (3) Additional instructions to the water master for the apportionment of water within the sub-district will be based upon available data, models, (including water master manual models), surveys and the state engineer's best professional judgment.
 - (4) The state engineer concludes that the water sub-district created by this rule shall include the following organizational features:
 - (a) The appointment of a single water master for the GALLINAS RIVER WATER SUB-DISTRICT.
 - (b) The water master shall be a direct employee of the OSE and shall receive compensation in an amount to be determined by the state engineer. The water master shall also be compensated for all actual and necessary expenses incurred in performing the duties of water master.
 - (c) After appointment of the water master, the state engineer shall prepare a budget of estimated amount required to pay the compensation and expenses of the water master to the end of the current fiscal year, and shall certify the same to the board of county commissioners of San Miguel and Guadalupe counties, wherein the duties of the water master are to be performed. The budget shall specify the distribution of the amounts to be charged against and allotted to each water user or ditch owner, and which respective amounts shall be based upon the quantity of water received or to be received by each in proportion to the total quantities of water delivered or to be delivered under the water rights of all. The salary and expenses of the water master will be paid monthly by the board of county commissioners in accordance with the requirements of NMSA, 1978, Section 72-3-4 (1907).

[19.26.11.9 NMAC - N, 8/29/03]

HISTORY OF 19.26.11 NMAC:

Pre-NMAC History:

Order No. 041, Declaration of Gallinas River Water District of the Pecos River Stream System, originally filed with the Supreme Court Law Library 7/27/53. Filed with the State Records Center 6/27/91.

History of Repealed Material:

Order No. 048 Rescinded Order No. 041 on 10/7/54.

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 25 ADMINISTRATION AND USE OF WATER - GENERAL PROVISIONS
PART 13 ACTIVE WATER RESOURCE MANAGEMENT

19.25.13.1 ISSUING AGENCY: Office of the State Engineer.
[19.25.13.1 NMAC - N, 12/30/2004]

19.25.13.2 SCOPE: The state engineer adopts these rules and regulations to undertake the supervision of the physical distribution of water, to prevent waste, and to administer the available supply of water by priority date or by alternative administration, as appropriate. These rules apply to all water rights within the state from all sources of water, surface water and hydrologically connected groundwater.
[19.25.13.2 NMAC - N, 12/30/2004]

19.25.13.3 STATUTORY AUTHORITY: These rules and regulations are established pursuant to constitutional authority set forth in Article XVI of the New Mexico Constitution, and statutory authority enumerated in Sections 72-1-2; 72-2-8; 72-2-9; 72-2-9.1; 72-3-1-5; 72-4-20; 72-5-3 through 5; 72-5-18; 72-5-23; 72-5-24; 72-6-1 through 7; 72-8-1; 72-9-2; 72-12-1; 72-12-2; 72-12-8(D); 72-12-24; 72-13-2; 72-13-4 NMSA.
[19.25.13.3 NMAC - N, 12/30/2004]

19.25.13.4 DURATION: Permanent.
[19.25.13.4 NMAC - N, 12/30/2004]

19.25.13.5 EFFECTIVE DATE: December 30, 2004, unless a later date is cited at the end of a section.
[19.25.13.5 NMAC - N, 12/30/2004]

19.25.13.6 OBJECTIVE: The objective of these rules is to establish the framework for the state engineer to carry out his responsibility to supervise the physical distribution of water to protect senior water right owners, to assure compliance with interstate stream compacts and to prevent waste by administration of water rights. These framework rules employ long-standing statutory mechanisms specified at Section 72-3-1 through Section 72-3-5 NMSA, which describe procedures for the creation of water master districts and the appointment of water masters with certain defined duties and authorities. In addition, these rules fulfill the mandates of Section 72-2-9.1 NMSA, requiring the state engineer to adopt rules for priority administration based on appropriate hydrologic models and expedited marketing and leasing within water master districts subject to priority administration.
[19.25.13.6 NMAC - N, 12/30/2004]

19.25.13.7 DEFINITIONS: Unless defined below in a specific section of these rules, all words used herein shall be given their customary and accepted meanings. All uses of masculine pronouns or possessives shall be held to include the feminine.

A. Adjudication: A comprehensive court proceeding to establish the elements of each water right for all water right owners on a stream system with respect to the state of New Mexico and as among each other, including the priority, amount, purpose, periods and place of use and the specific tracts of land to which the water right is appurtenant, as provided by Section 72-4-19 NMSA.

B. Administrable water right: A water right or right to impound, store or release water, the elements of which have been determined by a court of competent jurisdiction or determined on an interim basis by the state engineer under these rules and regulations. The state engineer may make determinations of the elements of a water right for purposes of administration prior to the commencement or completion of, and during the pendency of, a water rights adjudication. State engineer determinations made for purposes of administration are subject to review by any court of competent jurisdiction and are not binding on that court. Such determinations are subject to the decrees of an adjudication court of competent jurisdiction, and are not binding on such an adjudication court.

C. Administration: Distribution by a water master of available water supplies within a water master district or sub-district, subject to any legal constraints identified by or imposed on the state engineer, for specific beneficial uses by the owners of administrable water rights that are in-priority. There are four forms of administration available to achieve different objectives. These forms are defined below together with subsidiary definitions. A water master may, based on the applicable district-specific regulations, use any of these forms of administration, depending on the specific legal and physical aspects of the water supplies that are subject to administration and the existence or absence of agreements for alternative administration. Administration may also

combine these forms within a water master district, as the water master finds appropriate or necessary. The specific form of administration, or combination of forms of administration, that will be utilized in each water master district will be established through promulgation of district-specific regulations. Notice of such promulgation will be provided pursuant to Subsection D of 72-2-8 NMSA.

(1) Direct flow administration

(a) Direct flow water: All the flow of a stream, including storage reservoir inflows that are legally bypassed through that reservoir, but excluding sources of flow augmentation such as storage water releases or imported water.

(b) Direct flow administration: Distribution of direct flow water by a water master for diversion and beneficial use, or for diversion and storage in a reservoir, in accordance with the affected administrable water rights. Direct flow administration consists of both protection of available direct flow water for diversion and use by in-priority administrable water rights, and protection of direct flow water from out-of-priority diversion. Direct flow administration may incorporate changes to the water master's determination of which water rights are in-priority and which are out-of-priority on a daily basis, depending on the currently available direct flows.

(2) Storage water administration

(a) Storage water: Water stored in a reservoir in-priority and in accordance with the conditions of an administrable water right and subsequently released from storage. Storage water does not include direct flow water that is bypassed through a reservoir.

(b) Storage water administration: Administration by a water master of the release from reservoirs and subsequent downstream diversion of storage water in accordance with the requirements of the applicable administrable water rights for such release and diversion. Storage water administration includes both the distribution of storage water released for the benefit of those having rights to its use, and also the protection of storage water releases from diversion by water right owners having only an administrable water right to direct flow water. Conveyance losses that occur as a result of the delivery of storage water shall be borne by the owner of the applicable administrable water right, and storage water administration shall account for those conveyance losses. For purposes of administration, imported water shall be administered in the same manner as storage water; however, imported water is subject to 100% depletion. The beneficial use of imported water is exclusive in the owner of the right to its use and is not subject to priority call in the basin of use, but its diversion from the basin of origin is subject to priority administration in that basin.

(3) Depletion limit administration

(a) Depletion limit: The amount of surface water that is available for depletion by both surface water rights and hydrologically connected groundwater rights within a water master district or sub-district, taking into account interstate stream compact compliance requirements. Taking into account the conjunctive nature of surface and groundwater, the depletion limit may be greater than, or less than, the physically available surface water supply.

(b) Administration date[s]: A date, or dates, to be determined by the state engineer, where administration within a specific water master district is to be in effect for a period of time to be determined by the state engineer for interstate stream compact compliance purposes, or to address substantial long-term groundwater effects on surface supply, as expressed in a depletion limit. If an administration date is determined and published for a district, no water rights with priority dates later than the administration date shall be exercised in the absence of a replacement plan approved by the state engineer.

(c) Depletion limit administration: Administration by a water master to curtail water rights with priority dates junior to an administration date. Such out-of-priority rights shall not use water in the absence of a replacement plan approved by the state engineer.

(d) Replacement water: Water acquired temporarily by an out-of-priority administrable water right from an in-priority administrable water right pursuant to a replacement plan for the purpose of offsetting surface water depletions attributable to an out-of-priority administrable water right and preventing impairment of in-priority administrable water rights.

(e) Replacement plan: A plan submitted by the owner(s) of administrable water rights, and approved by the state engineer for no more than two consecutive years, subject to renewal, for the purpose of offsetting depletions attributable to out-of-priority administrable water rights.

(4) Alternative administration: Administration that is based on water sharing agreement among affected water right owners, and that is acceptable to the state engineer. Such administration may include voluntary shortage sharing such as, but not limited to, percentage division or pro rata allocation, rotation of water use, and reduced diversions. Where there is an existing shortage sharing agreement between acequias or community ditches confirmed on the first Monday of April of each year in accordance with Section 73-2-47 NMSA or thereafter as

necessary, it shall be recognized in the district-specific regulations, but nothing in this section shall be taken to impair the authority of the state engineer and water master to regulate the distribution of water from the various stream systems of the state to the ditches and irrigation systems entitled to water therefrom under the provisions of this article. Alternative administration may be substituted for any of the forms of administration above described.

D. Administration date[s]: See definition under Subsection C of 19.25.13.7 NMAC.

E. Consumptive irrigation requirement: See definition under Subsection S of 19.25.13.7 NMAC.

F. Consumptive use: The quantity of water beneficially consumed during the application of water to beneficial use.

G. Conveyance loss: The quantity of water that is effectively removed from a stream system due to seepage or evapotranspiration as calculated between a measurement device used to measure the available water supply and a downstream point of diversion for an administrable water right or a downstream point of delivery.

H. Depletion: That consumptively used portion of a diversion that has been evaporated, transpired, incorporated into crops or products or used by livestock, or man-made consumptive uses such as, but not limited to, municipal, industrial and domestic uses, or otherwise removed from, and not returned to, the available water supply, including all incidental depletions associated with the beneficial use. Depletions shall include, but not be limited to:

(1) any increase in depletions resulting from construction projects for the restoration and maintenance of fish and wildlife habitat that result in increased depletion of water over that amount that would have been depleted had there been no restoration; such projects are subject to the permitting authority of the state engineer;

(2) any increase in depletions resulting from changes in reservoir operations that increase the amount of water depleted over that amount which would have been depleted had there been no change in the reservoir's operations; such as, but not limited to, changes in historic release patterns; such changes are subject to the permitting authority of the state engineer.

I. Depletion limit: See definition under Subsection C of 19.25.13.7 NMAC.

J. Depletion limit administration: See definition under Subsection C of 19.25.13.7 NMAC.

K. Direct flow administration: See definition under Subsection C of 19.25.13.7 NMAC.

L. Direct flow water: See definition under Subsection C of 19.25.13.7 NMAC.

M. District: When used in these regulations, means water master district.

N. Diversion: The quantity of water taken from a ground or surface water source by a constructed structure or project to supply a beneficial use.

O. Expedited marketing and leasing: Any process within a district in which water rights are subject to priority administration whereby changes in use or place of use of water may be effected so as to minimize costly and time-consuming administrative procedures. Expedited marketing and leasing processes may include, but are not limited to, expedited permit proceedings before the state engineer through the use of the appropriate hydrologic models adopted by the state engineer for the district. Subsection C of 72-2-9.1 NMSA expressly provides that rules and regulations concerning expedited marketing and leasing "shall not apply to acequias or community ditches or to water rights served by an acequia or community ditch."

P. Farm delivery requirement: See definition under Subsection S of 19.25.13.7 NMAC.

Q. Imported water: Water removed from, and not returned to, its hydrologic basin of origin delivered for use in a different basin or drainage.

R. In-priority: If the currently available direct flow water is sufficient for distribution to a specific use administrable water right, then that right is in-priority. If a water right has a priority date that is senior to the applicable administration date, that water right is in-priority. In the case of storage water, that amount of the total inflow to a reservoir that exceeds the volume of water that must flow through the dam to serve senior administrable water rights to direct flow water is in-priority for storage.

S. Irrigation water requirements: Irrigation water requirements can be expressed in several ways, depending on circumstances:

(1) **Consumptive irrigation requirement (CIR):** The quantity of irrigation water, expressed as a depth or volume, exclusive of effective rainfall, that is consumptively used by plants or is evaporated from the soil surface during one calendar year. The CIR may be numerically determined by subtracting effective rainfall from the consumptive use.

(2) **Farm delivery requirement:** The quantity of water, exclusive of effective rainfall, that is delivered to the farm head gate or is diverted from a source of water that originates on the farm itself, such as a well or spring, to satisfy the consumptive irrigation requirement of crops grown on a farm during the irrigation accounting year, or as otherwise provided by permit.

(3) **Project diversion requirement:** The annual quantity of water necessary to be diverted from a source of water to satisfy the farm delivery requirement and to account for off-farm ditch conveyance delivery losses during the irrigation accounting year.

T. **Measuring devices:** Gauging or metering devices, installed and operated as required by the state engineer.

U. **Out-of-priority:** If the currently available direct flow water is insufficient to serve all administrable water rights, and therefore an administration date is adopted or a priority call placed, then those administrable water rights are out-of-priority that have a priority date junior to the applicable administration date or are junior to the priority of the water right placing the priority call. In the case of storage water, if the inflow to a reservoir is equal to, or less than, the quantity of water necessary to serve downstream senior Administrable water rights from the direct flow, then such direct flow must be bypassed and the right to impound and store water in that reservoir is out-of-priority. Water that was stored in-priority is not available for use except by those with administrable water rights to the use of the storage water.

V. **Priority administration:** All the forms of administration defined under administration are methods of priority administration. Priority administration involves any administrative scheme implemented by a water master in accordance with the priority dates of administrable water rights, including direct flow, storage water and depletion limit administration. See, generally, administration.

W. **Project:** Any man-made works intended physically to control or to use water for a beneficial purpose of use.

X. **Replacement water:** See definition under Subsection C of 19.25.13.7 NMAC.

Y. **Replacement plan:** See definition under Subsection C of 19.25.13.7 NMAC.

Z. **Return flow:** That amount of diverted water returned to the available water supply.

AA. **State engineer:** The New Mexico state engineer, or his designated appointee.

BB. **Storage water:** See definition under Subsection C of 19.25.13.7 NMAC.

CC. **Storage water administration:** See definition under Subsection C of 19.25.13.7 NMAC.

DD. **Waste:** Diversion of water in excess of that amount reasonably necessary to supply a beneficial use in accordance with accepted water use practices that are consistent with considerations of water conservation.

EE. **Water master:** An official duly appointed by, and under the general supervision of, the state engineer, pursuant to Section 72-3-2 NMSA, who shall have immediate charge of the diversions and distribution of waters in the water master district.

FF. **Water master district:** An area designated as a water district or sub-district by the state engineer for purposes of administration, as provided in Section 72-3-1 NMSA.

GG. **Water master district manager:** The state engineer district supervisor is the manager of any water master district within his particular state engineer district and the direct supervisor of the water master. [19.25.13.7 NMAC - N, 12/30/2004]

19.25.13.8 CONSTRUCTION: These rules and regulations shall be construed as consistent with, and subject to, the authorities of the state engineer for the administration of water in the state of New Mexico. These rules and regulations shall not be construed as imposing any limitation on the authority of the state engineer to administer water rights, act on water rights applications, permit water rights, or order the curtailment, in whole or in part, of the use of water under any water right. Subsection H of 72-2-8 NMSA provides that these rules and regulations are presumed to be the correct implementation of the law. [19.25.13.8 NMAC - N, 12/30/2004]

19.25.13.9 USE OF THESE RULES AND REGULATIONS: These rules and regulations provide the framework for the promulgation of specific water master district rules and regulations. [19.25.13.9 NMAC - N, 12/30/2004]

19.25.13.10 STATE ENGINEER ADOPTION OF DISTRICT-SPECIFIC RULES AND REGULATIONS: For every district in which water rights administration is requested, or the state engineer determines in the performance of his duties under Section 72-2-1 NMSA that water rights administration is required for the economical and satisfactory apportionment of water, the state engineer shall adopt rules and regulations, pursuant to Subsection D of 72-2-8 NMSA, specific to the water master district, which incorporate and adapt the provisions of these rules and regulations to the needs of the specific district. [19.25.13.10 NMAC - N, 12/30/2004]

19.25.13.11 STATE ENGINEER AUTHORITY TO CREATE WATER MASTER DISTRICTS AND APPOINT WATER MASTERS: The state engineer may create water master districts and appoint water masters in any drainage areas of the state pursuant to Section 72-3-1 through Section 72-3-5 NMSA and these regulations. The water master district manager shall provide the water master with guidelines for administration, including his determination, for purposes of administration, of all administrable water rights within the water master district. Water master guidelines shall be in the form of a water master manual applicable to each water master district or sub-district. Comments from the public shall be taken and considered prior to finalizing the water master manuals. Notice shall be provided in accordance with Subsection D of 72-2-8 NMSA. The state engineer may administer water rights pursuant to a draft water master manual for a specific period of time, which will be determined in the district-specific regulations, prior to finalizing a manual so that the adopted manual will be based upon actual experience and the collective comments of the water right owners in the district.
[19.25.13.11 NMAC - N, 12/30/2004]

19.25.13.12 CREATION OF A WATER MASTER DISTRICT: The state engineer may create water master districts within the state, provided that:

- A. the state engineer finds that the creation of such a water master district is necessary for the economical and satisfactory administration of water;
- B. the boundaries of the water master districts are in conformity with drainage areas as defined by the state engineer;
- C. the water master districts are designated by names; and
- D. as far as possible, the water master districts comprise one or more stream systems or stream reaches, including hydrologically connected groundwater, as defined by the state engineer.

[19.25.13.12 NMAC - N, 12/30/2004]

19.25.13.13 CHANGING A WATER MASTER DISTRICT: Water master districts may be changed from time to time, as may be necessary in the opinion of the state engineer, for the economical and satisfactory apportionment of water.
[19.25.13.13 NMAC - N, 12/30/2004]

19.25.13.14 CREATION OF WATER MASTER SUBDISTRICTS: When, in his opinion, it shall be in the best interests of the state and the owners of water rights within any stream system within the state, the state engineer may divide water master districts further into sub-districts, each of which shall be designated by a distinct name.
[19.25.13.14 NMAC - N, 12/30/2004]

19.25.13.15 APPOINTMENT OF A WATER MASTER: Where the state engineer has created a water master district, the state engineer shall:

- A. appoint a water master for such district upon the written application of a majority of the water right owners of any water master district; or
- B. appoint a water master to administer the water master district and sub-districts where the state engineer finds that the public safety or interests of the state or water right owners in any water master district in the state require the appointment of a water master; where a water master has been appointed pursuant to such a finding, he may be appointed on either a temporary or a permanent basis.

[19.25.13.15 NMAC - N, 12/30/2004]

19.25.13.16 GENERAL AUTHORITY OF A WATER MASTER: The water master shall have immediate charge of the administration of waters within a water master district as necessary to protect the public safety and the interests of water right owners in a district or for the economic and satisfactory apportionment of water to all administrable water rights from the available water supply, and shall so regulate and control the waters of the district as to prevent waste. Administration implemented by the water master may be direct flow administration, storage water administration, depletion limit administration, alternative administration, or any combination thereof, as defined by district-specific regulations, depending on the physical and legal circumstances affecting the water resources and administrable water rights of the water master district. The water master may, as necessary, to effect administration:

- A. determine the available supply of water from time to time, considering conveyance losses, as appropriate and necessary for effective administration;

- B. implement administration of the storage, diversion, and use of the waters of the water master district in accordance with the administrable water rights;
 - C. administer the diversion of the waters of the water master district in priority or under an alternative administration;
 - D. administer diversions of the waters of the water master district in accordance with any administration date declared by the state engineer;
 - E. facilitate the formation and operation of water right owner groups to, among other things, improve the management of water supplies, water conservation, cooperation among water right owners and administration;
 - F. facilitate the negotiation and implementation of alternative administration agreements, including cooperative agreements, for sharing available water supplies;
 - G. adjust headgates and restrict diversions or pumping as required to administer water in accordance with principles of prior appropriation and beneficial use, to prevent the illegal use of water, and to prevent waste; and
 - H. exercise all such authority as is required to accomplish effective water rights administration.
- [19.25.13.16 NMAC - N, 12/30/2004]

19.25.13.17 SPECIFIC DUTIES OF A WATER MASTER: Taking into account the available water supply in general and considering conveyance losses, the water master shall implement administration in the district. The water master is authorized to do the following, as may be provided by district-specific rules and regulations and as necessary to effect administration:

- A. determine the physical capacity of diversion and delivery structures for each point of diversion expressed as a maximum rate of flow in cubic feet per second (cfs);
- B. determine the maximum rate of flow, expressed in cfs, required to meet the total demand for administrable water rights served by that point of diversion;
- C. take into account water needed to provide for adequate hydraulic pressure to ensure maximum irrigation efficiency and charge of the system;
- D. take into account water needed for additional uses such as, but not limited to, silt-flushing;
- E. during times of high stream flow, when there are no legal constraints imposed upon the physical administration of the available water supply, relax limits on the amount of water that may be diverted in order that the delivery system might operate more efficiently, except that under no circumstances may the total CIR of water rights served from the project increase;
- F. with respect to all agricultural uses, require the designation by the water right owner of land to be irrigated in a particular season and verify the irrigability of that land;
- G. ensure that water diversions do not exceed the amount needed to serve administrable water rights, except as provided in Subsections C through E, above;
- H. administer direct flow water for delivery to in-priority administrable water rights, curtail diversions by out-of-priority administrable water rights, ensure the delivery of storage water to those having rights to its use, and protect storage water releases from diversion by those without rights to its use;
- I. establish protocols for communication and exchange of information with water right owners as required for administration;
- J. maintain accurate records of all administration activities, including meter readings, and establish a protocol for the inspection and copying of such records, at the requestor's expense;
- K. identify waste and illegal use of water, including re-diversion and reuse of return flows other than as specifically provided for in an administrable water right;
- L. upon a determination that a use is illegal or constitutes waste, cap, lock or otherwise temporarily disable any mechanism for illegal diversion; no permanent disablement may occur without hearing before the state engineer;
- M. where he has determined that a facility must be permanently disabled, issue an order directing that the diversion be permanently disabled, which order shall be heard by the state engineer as provided below; pending review of the water master's order, the temporary disablement of the disputed diversion shall remain in place;
- N. perform all such duties as are required to accomplish administration.

[19.25.13.17 NMAC - N, 12/30/2004]

19.25.13.18 NO CHANGE IN DITCH SYSTEM MANAGEMENT: Except as required in the performance of the water master's duties to regulate the distribution of water from the various stream systems of the state to the points of diversion of ditches and irrigation systems entitled to water therefrom, these rules and regulations shall not

be construed to affect the internal management of projects, including acequias or community ditches and other water delivery systems, in accordance with Section 72-9-2 NMSA, which provides for the distribution of water from the ditches and acequias according to local or community customs, rules and regulations that have been properly adopted. The state engineer's authority, and that of his water master, to regulate the diversion of water from the source to a ditch or acequia is unaffected by either Section 72-9-2 NMSA or this provision.
[19.25.13.18 NMAC - N, 12/30/2004]

19.25.13.19 WATER MASTER SUPERVISION OF MEASUREMENT: In all districts in which water masters are appointed, water masters shall have the authority to supervise the measurement of water in order to conduct administration.
[19.25.13.19 NMAC - N, 12/30/2004]

19.25.13.20 HEADGATES AND MEASURING DEVICES REQUIRED: The state engineer shall determine those points of diversion from, and return flow discharge to, the stream system where measuring devices are necessary for the efficient administration of water within the water master district. The owners of private ditches, the commissioners of acequias or community ditches, the boards of irrigation and conservancy districts, and all other owners of administrable water rights and operators of projects that are notified by the water master of the need to comply with this rule shall cause to be installed and maintained headgates and measuring devices of types and at locations acceptable to the water master, as may be provided by district-specific rules and regulations, once promulgated and adopted by the state engineer and ordered by the state engineer, or as otherwise ordered pursuant to Paragraph 3 of Subsection B of Section 72-2-8 NMSA.
[19.25.13.20 NMAC - N, 12/30/2004]

19.25.13.21 WATER TO BE DIVERTED OR DELIVERED THAT WILL BE PLACED TO ACTUAL BENEFICIAL USE; ESTABLISHING BENEFICIAL USE REQUIREMENTS: If a particular water right is in-priority, the water master shall allow the diversion or delivery of water that will be put to actual beneficial use without waste. The water master shall make such investigations, including inspections of lands, well records, diversion records and municipal records, as are necessary to determine, for purposes of administration, the current beneficial use needs for all types of water uses under administrable water rights during periods of priority administration. Water deliveries for irrigation uses shall not be made unless the land on which water will be used has an administrable water right as determined by the state engineer. Nothing in this provision shall be construed to allow the water master to prefer some beneficial uses to other beneficial uses on any grounds other than priority, unless he is doing so pursuant to local agreements through alternative administration. Such determination shall not affect the maximum legal entitlement to water.
[19.25.13.21 NMAC - N, 12/30/2004]

19.25.13.22 FARM DELIVERY AND PROJECT DIVERSION REQUIREMENT DETERMINATIONS: In the absence of applicable court orders or adjudication decrees, the state engineer shall, prior to administration, make a determination of farm delivery and project diversion requirements in water master districts that are subject to administration. The project diversion requirement may be expressed as a maximum rate of diversion, an annual maximum diverted volume of water for a specified use, or both. The state engineer may modify these determinations based on new information, including field experience of the water master. None of the requirements of this provision shall apply if a determination adequate for effective water administration has been made by a court of competent jurisdiction.
[19.25.13.22 NMAC - N, 12/30/2004]

19.25.13.23 OBJECTIONS TO, AND STATE ENGINEER REVIEW OF, WATER MASTER DECISIONS: Objections to any act or failure to act of a water master shall be made in the first instance informally, or in writing, to the water master who shall take prompt action on the objection if he determines that any action is warranted. If the water master fails to resolve the objection, further objections shall be made to the state engineer, who shall hear the matter in accordance with Section 72-3-3 NMSA. Streamlined processes for the prompt hearing of appeals from water master decisions shall be set up for each water master district. Filing of an objection to an act or failure to act by the water master will not stay the water master's action or failure to act, or his authority to administer the water right, pending resolution of the objection.
[19.25.13.23 NMAC - N, 12/30/2004]

19.25.13.24 WATER MASTER ADMINISTRATION OF AN ADMINISTRATION DATE: In the event that the state engineer determines an administration date for a water master district, the water master shall oversee the curtailment of all administrable water rights junior to the administration date. The water master shall not allow out-of-priority use in the absence of a replacement plan approved by the state engineer.
[19.25.13.24 NMAC - N, 12/30/2004]

19.25.13.25 WATER MASTER ENTRY ON PRIVATE OR PUBLIC LAND: Pursuant to Section 72-8-1 NMSA, the water master shall have the right to enter private or public lands in order to:

- A. install, inspect, read, and adjust measuring devices and require the replacement or repair of such measuring devices;
- B. inspect and adjust headgates or require the repair of such headgates;
- C. make seepage evaluations;
- D. conduct inspections of canals, wells, wasteways or sluiceways;
- E. prevent waste and prevent illegal water use;
- F. cap, lock or otherwise temporarily disable any mechanism for illegal diversion; and
- G. perform such other duties as are required to accomplish administration.

[19.25.13.25 NMAC - N, 12/30/2004]

19.25.13.26 WATER MASTER REPORTS: Annually, the water master shall submit a report including a record of total diversions and deliveries of direct flow water and storage water, as applicable, a statement of expenditures, a list of infrastructure and metering improvements needed or performed, problems encountered, and any other pertinent issues or aspects of administration. The report shall also address the amount of water needed to supply the requirements of the water master district, the amount available, the works which are without their proper supply, the supply required during the period preceding the water master's next regular report and such other information as the state engineer may require. The report shall be submitted to the state engineer and be publicly available for inspection and copying, at the requestor's expense.

[19.25.13.26 NMAC - N, 12/30/2004]

19.25.13.27 ADMINISTRABLE WATER RIGHTS: The water master district manager for each water master district will define each administrable water right by its elements as set forth in Subsections A through G below. In all instances where the state engineer makes determinations of priority based on best available evidence as set forth in Subsections A through G below, he shall publish a list of his determination of the water rights in the water master district for review and provide opportunity to affected water right owners to informally present evidence. The state engineer shall hear objections to the water master district manager's determination of an administrable water right in accordance with Section 72-2-16 NMSA. Filing of an objection to the water master district manager's determination of an administrable water right will not stay the state engineer's administration based upon that determination, pending resolution of the objection. Appeals from decisions of the state engineer shall be in accordance with Section 72-7-1 NMSA. The water master district manager for each water master district will define each administrable water right by its elements as set forth in:

- A. a partial final decree or a final decree entered by an adjudication court of competent jurisdiction, subject to any state engineer permit issued subsequent to entry of said adjudication decree; or, if no decree has been entered, then;
- B. a subfile order entered by an adjudication court of competent jurisdiction; or, if no subfile order has been entered, then;
- C. an offer of judgment signed by the defendant in a water rights adjudication; or, if no offer of judgment has been signed, then;
- D. a hydrographic survey conducted and filed in accordance with Section 72-4-17 NMSA or Section 72-4-16 NMSA; or, if no hydrographic survey has been filed, then;
- E. a license issued by the state engineer; or, if no license has been issued, then;
- F. a permit issued by the state engineer, accompanied by proof of actual beneficial use; and
- G. a determination made by the state engineer based on the best available evidence, consisting of, where available, any filings with the office of the state engineer, field or documentary evidence of beneficial use associated with the right including historical aerial photography, diversions records of historical diversions, historical studies containing evidence regarding water use, and data regarding irrigation and water delivery system requirements.

[19.25.13.27 NMAC - N, 12/30/2004]

19.25.13.28 SUPERSESSION BY A COURT: Any determinations made by the state engineer for administration purposes within any district subject to administration in the absence of a completed adjudication shall be subject to any decrees issued by an adjudication court of competent jurisdiction or any court of competent jurisdiction.

[19.25.13.28 NMAC - N, 12/30/2004]

19.25.13.29 ADMINISTRATION BY ADMINISTRATION DATE: The state engineer may adopt an administration date, based on his best professional judgment of the water supply available for consumptive use by water right owners in the water master district or for depletion within the state of New Mexico as may be appropriate, and the date on which that administration date will be effective, by order in accordance with Paragraph 3 of Subsection B of 72-2-8 NMSA, for any water master district. The state engineer may revise an administration date as necessary to achieve the objectives of these rules and regulations. The state engineer shall publish the adoption or revision of an administration date once a week for two consecutive weeks in two newspapers of general circulation within the water master district affected by such adoption or revision. Upon the effective date of an administrative date, all out-of-priority administrable water rights must cease diversion, except as provided by an approved replacement plan. Determination of an administration date shall be ordered to implement depletion limit administration and shall be specifically provided for by the provisions of district-specific regulations to achieve compliance with an interstate stream compact; or, in the state engineer's performance of his duties under Section 72-2-1 NMSA upon further formal state engineer action pursuant to Section 72-2-8 NMSA for reasons of public safety or the interests of the water right owners in the district.

[19.25.13.29 NMAC - N, 12/30/2004]

19.25.13.30 OBJECTION TO, AND STATE ENGINEER REVIEW OF, STATE ENGINEER DETERMINATION OF AN ADMINISTRATION DATE: Owners of administrable water rights are encouraged to resolve objections to the state engineer's determination of an administration date informally with the state engineer's district office. If such informal negotiations fail, the state engineer shall hear objections to his determination of an administration date in accordance with Section 72-2-16 NMSA. Filing of an objection to an administration date will not stay the state engineer's administration by administration date, pending resolution of the objection. Appeals from decisions of the state engineer shall be in accordance with Section 72-7-1 NMSA.

[19.25.13.30 NMAC - N, 12/30/2004]

19.25.13.31 APPLICATION FOR APPROVAL OF REPLACEMENT PLANS: Replacement plans are available only during state engineer priority administration of the available water supply to prevent serious and imminent economic harm in response to, and only until water rights are permanently transferred, if necessary. The state engineer may approve replacement plans based on the adopted generalized hydrologic analysis that, in his professional judgment, provide sufficient replacement water to fully offset depletions to surface waters caused by out-of-priority diversions in order to prevent impairment of senior water right owners by the junior water right owner that would otherwise be out-of-priority. Replacement plans may be approved temporarily until permanent transfer of water is effected for water right owners who are likely to face permanent curtailment, or for limited periods when a water right owner is not likely to face permanent curtailment. The owner of an out-of-priority administrable water right that is subject to administration in a water district may submit to the state engineer an application for approval of a replacement plan. The application shall contain the following information:

- A. the name and address of the applicant;
- B. the location, amount and priority date of applicant's existing administrable water right;
- C. each source of replacement water and the amount of historic consumptive use related to the water right that is the source of replacement water, to be established by documentation satisfactory to the state engineer;
- D. an estimate of the amount of water to be diverted by the applicant;
- E. a map acceptable to the state engineer showing the source and point of diversion of the replacement water and the location of the proposed use;
- F. a copy of any agreement between the applicant and the owner of water to be used as replacement water, or other documentation demonstrating to the state engineer's satisfaction that the applicant has a legal entitlement to a source of water to be used as replacement water;
- G. the expected duration of the plan; and
- H. any other information the state engineer deems necessary.

[19.25.13.31 NMAC - N, 12/30/2004]

19.25.13.32 GENERALIZED HYDROLOGIC ANALYSIS: The state engineer will develop a generalized hydrologic analysis for a water master district subject to administration as the basis for the development, review and approval of replacement plans within that water master district. The generalized hydrologic analysis will be based upon, and obtained from, the best available hydrologic model or models designated by the state engineer for the water master district. The hydrologic models based upon the best available hydrogeologic data will take into account existing surface and groundwater diversions and the combined effect of groundwater and surface water uses on the basin groundwater and surface water system. Adoption of a generalized hydrologic analysis shall be undertaken in conjunction with the public rule-making process for district-specific regulations pursuant to Subsection D of 72-2-8 NMSA. The generalized hydrologic analysis shall include guidelines for the approval of applications. If an applicant agrees to the use of the generalized hydrologic analysis in the review of his application, the state engineer shall expedite his review of the application on that basis. The generalized hydrologic analysis may be adopted as part of basin-specific regulations developed by the state engineer for a specific water master district, or subsequent thereto. A generalized hydrologic analysis shall not be adopted in the absence of proposed district-specific regulations for administration. After consideration of public comment on a proposed generalized hydrologic analysis, the state engineer may adopt a generalized hydrologic analysis for use to evaluate replacement plans pertinent to administration within the water master district. In order to adopt a generalized hydrologic analysis, the state engineer shall find that it is sufficiently conservative to assure that any replacement plan that is approved:

A. will not impair in-priority administrable water rights and by limiting diversions under the replacement plan to no more than the average of recent historical beneficial use will be a sufficient basis for such a finding; and

B. will not result in any increase in depletions within the water master district; accepting an applicant's assurance that no water shall be diverted under that portion of the in-priority administrable water right that is committed to the replacement plan, and finding that foregone average historic depletions associated with the temporarily transferred in-priority water right are at least 10 percent greater than the average historic depletions associated with the out-of-priority administrable water right, are together a sufficient basis for such a finding.
[19.25.13.32 NMAC - N, 12/30/2004]

19.25.13.33 APPROVAL OF REPLACEMENT PLANS: The state engineer shall determine the adequacy of each source of water proposed for use as replacement water based upon the generalized hydrologic analysis adopted by the state engineer. Replacement plans shall be approved for a period not to exceed two years but may be renewed upon application. Upon finding that the approval of a replacement plan meets the criteria of Section 19.25.13.32 NMAC, is necessary to prevent crop loss or other serious economic harm to the owner of an out-of-priority administrable water right, and is not contrary to conservation of water or the public welfare of the state, the state engineer shall approve the replacement plan. The state engineer may require such terms and conditions for the approval of a replacement plan as he deems to be necessary, including time limitations on the duration of the replacement plan. State engineer approvals of replacement plans shall be presumed to be in proper implementation of the provisions of the water laws administered by him as provided by Subsection H of 72-2-8 NMSA. Any approved replacement plan shall continue in effect during the course of objections and appeals proceedings.
[19.25.13.33 NMAC - N, 12/30/2004]

19.25.13.34 AMENDMENT AND RENEWAL OF REPLACEMENT PLANS: The holder of a replacement plan may submit an application to the state engineer at any time during the term of the replacement plan to amend or renew the replacement plan. Upon state engineer determination that the permanent acquisition of a senior water right to replace the depletions caused by the exercise of an out-of-priority water right is not required, or upon a showing of a good faith effort to permanently acquire a senior water right in the absence of such a determination, the state engineer may approve the renewal or amendment of a replacement plan in the same manner as set forth in Section 19.25.13.33 NMAC, after a review of any new information or evidence of changed conditions submitted in support of the application.
[19.25.13.34 NMAC - N, 12/30/2004]

19.25.13.35 ACCURACY OR SUFFICIENCY OF INFORMATION; MODIFICATION: Each applicant for, or holder of, a replacement plan is responsible for the accuracy and sufficiency of all material information provided in support of the application to the state engineer before or after approval of the replacement plan. If an approved replacement plan proves to be insufficient to replace depletions, the state engineer may require the holder

of a replacement plan to provide additional replacement water at any time during the term of the replacement plan or within a reasonable period after the term of the replacement plan if necessary to offset cumulative impacts.
[19.25.13.35 NMAC - N, 12/30/2004]

19.25.13.36 REVOCATION OF REPLACEMENT PLANS: The state engineer may revoke approval of a replacement plan, in whole or in part, where material information provided by the applicant for, or the present holder of, the replacement plan is inaccurate; for non-compliance with the terms and conditions of the replacement plan; or for non-compliance with these rules. Upon revocation of a replacement plan, to the extent of the revocation, all diversions authorized by the revoked portion of the replacement plan must cease and the holder of the replacement plan must, within a reasonable period after revocation of the replacement plan, replace the diversion and depletion overruns incurred, if any.
[19.25.13.36 NMAC - N, 12/30/2004]

19.25.13.37 FALLOWING AND NON-USE REQUIREMENTS: Water once committed to a replacement plan cannot be used for any other purpose during the term of the replacement plan. In the event that the source of replacement water is irrigated land, the land to which the water right being used for replacement water is appurtenant shall be fallowed. Fallowed land shall not be irrigated from any source, including domestic and supplemental wells, without written approval by the state engineer. Fallowed land shall be specifically identified by map or survey, or by other means acceptable to the state engineer. Without written approval by the state engineer, no water shall be diverted on, or delivered to, fallowed land during the period in which the water is being used as replacement water. In the event the source of replacement water is not irrigated land, the use to which the owner of the water right that is the source of replacement water is entitled under his right shall, during the term of the replacement plan, be reduced by the amount of water committed to the replacement plan.
[19.25.13.37 NMAC - N, 12/30/2004]

19.25.13.38 FORMATION OF WATER RIGHT OWNER GROUPS: Water right owners are encouraged to form water right owner groups for the purpose of discussion and negotiation among themselves, with other water right owners, or with the water master, regarding the possibility of shortage sharing agreements and other forms of alternative administration and joint application for replacement plans. Subject to the exemption for acequias and community ditches under Subsection C of 72-2-9.1 NMSA, in the event that water right owner groups, aided by the water master, attempt to reach an agreement for Alternative administration, such efforts by the water right owner groups and the water master shall constitute promotion of expedited marketing and leasing as required by that statute.
[19.25.13.38 NMAC - N, 12/30/2004]

19.25.13.39 REPLACEMENT PLANS BY WATER RIGHT OWNER GROUPS: Water right owners may, individually or collectively, submit applications for replacement plans as described above. Except as may be limited by a specific regulation or order, water conservancy districts, irrigation districts, municipalities, or other entities may initiate and submit plans in accordance with these rules. Water right owner groups operating under an approved replacement plan shall notify the state engineer of any plan participant who is not in compliance with the replacement plan.
[19.25.13.39 NMAC - N, 12/30/2004]

19.25.13.40 OBJECTIONS TO, AND APPEALS FROM, APPROVALS, DENIALS AND REVOCATIONS OF REPLACEMENT PLANS: Within thirty days after approval of a replacement plan, the state engineer shall cause to be published a summary of the approved replacement plan providing for the opportunity to appeal the approval, denial or revocation of a replacement plan pursuant to Section 72-2-16 NMSA. The state engineer shall hear objections to his approval, denial or revocation of all part of a replacement plan in accordance with Section 72-2-16 NMSA but shall endeavor to hear such objections in the same prompt manner as provided by Section 72-3-3 NMSA for review of water master actions. Filing of an objection to an approval, denial or revocation of a replacement plan will not stay the state engineer's determination that all water use under all, or part of, a revoked replacement plan must cease, pending resolution of the objection.
[19.25.13.40 NMAC - N, 12/30/2004]

19.25.13.41 APPEALS FROM STATE ENGINEER DECISIONS: All appeals from state engineer review of objections to any actions or decisions made pursuant to these rules and regulations shall be in accordance with Section 72-7-1 NMSA.
[19.25.13.41 NMAC - N, 12/30/2004]

19.25.13.42 REQUEST FOR ADMINISTRATION FROM THE INTERSTATE STREAM COMMISSION: The state engineer shall proceed with water rights administration when requested to do so by the New Mexico interstate stream commission for the purpose of compliance with interstate stream compacts, which request shall be in the form of a resolution.
[19.25.13.42 NMAC - N, 12/30/2004]

19.25.13.43 EMERGENCY ADMINISTRATIVE ACTIONS: The state engineer may determine that the need for water rights administration in a specific district is so urgent that water rights administration may proceed directly under order issued pursuant to the procedural requirements of Paragraph 3 of Subsection B of 72-2-8 NMSA.
[19.25.13.43 NMAC - N, 12/30/2004]

19.25.13.44 EXPEDITED MARKETING AND LEASING: The state engineer will review and analyze permit applications in water master districts affected by priority administration on an expedited basis utilizing the appropriate hydrologic model adopted by the state engineer for the water master district. Expedited review of permit applications in water master districts affected by priority administration shall fulfill the requirements of Subsection C of 72-2-9.1 NMSA for the promotion of expedited marketing and leasing of water rights.
[19.25.13.44 NMAC - N, 12/30/2004]

19.25.13.45 KNOWLEDGE OF AND COMPLIANCE WITH STATUTES, RULES, REGULATIONS AND CODES: It shall be the responsibility of all applicants and permittees to know of, and comply with, all applicable statutes, rules, regulations and codes.
[19.25.13.45 NMAC - N, 12/30/2004]

19.25.13.46 RETROACTIVE EFFECT: These rules and regulations shall have retroactive effect on all water master districts already formed at the time of promulgation of these rules and regulations.
[19.25.13.46 NMAC - N, 12/30/2004]

19.25.13.47 SEVERABILITY: If any provision or provisions of these regulations are found to be invalid, the remaining provisions shall continue to be in effect.
[19.25.13.47 NMAC - N, 12/30/2004]

19.25.13.48 ENFORCEMENT: The state engineer may enforce these rules by all means within his legal authority.
[19.25.13.48 NMAC - N, 12/30/2004]

19.25.13.49 STATE ENGINEER OPTION TO REVISE RULES AND REGULATIONS: The state engineer may modify these rules and regulations as needed to accomplish the objectives of these rules and regulations. Removal of a regulation or a section of these rules and regulations, whether by a court or by the state engineer, shall not affect the validity of the remaining rules and regulations.
[19.25.13.49 NMAC - N, 12/30/2004]

19.25.13.50 LIBERAL CONSTRUCTION: These rules shall be liberally construed to carry out their purpose in accordance with Subsection H of 72-2-8 NMSA.
[19.25.13.50 NMAC - N, 12/30/2004]

HISTORY OF 19.25.13 NMAC: [RESERVED]