RIVEREYES OBSERVATIONS IN THE MIDDLE RIO GRANDE FOR THE 2014 IRRIGATION SEASON

FINAL REPORT

Prepared for

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EXECUTIVE SUMMARY

Reconnaissance of portions of the Middle Rio Grande is mandated by Reasonable and Prudent Alternative Element C of the 2003 Biological Opinion (U.S. Fish and Wildlife Service 2003). Such reconnaissance is conducted under the project commonly referred to as "RiverEyes." RiverEyes monitoring must be performed when flows are less than 300 cubic feet per second at San Acacia Diversion Dam. RiverEyes provides current information on river flows that allow action agencies to react quickly to rapidly changing conditions on the river, facilitate coordination among the agencies to prevent unexpected drying, and prepare for Rio Grande silvery minnow (*Hybognathus amarus*) rescues.

Under contract with the New Mexico Interstate Stream Commission, hydrologic conditions were monitored daily from April 1 through June 30, 2014. There was a 9-day hiatus in observations from July 1 through 9, 2014 as a consequence of delay in executing a contract with the Bureau of Reclamation. Records of hydrologic conditions during this period of contract interruption were obtained from Water Operations Conference Call notes and the U.S. Fish and Wildlife Service fish rescue crew. Under contract with the Bureau of Reclamation, hydrologic conditions were monitored daily from July 9 through October 31, 2014.

Channel drying was restricted to the Isleta and San Acacia reaches over the period of monitoring. The location and extent of channel drying varied over the period of monitoring in response to the magnitude and variance of in-stream flow, flow dynamics linked to localized and regional storm events, and out-of-channel diversion of water. The location and extent of channel drying also appears to vary with macrotopographic features of the river and its adjacent corridor. Notable among these features is the elevation of the streambed relative to that of adjacent segments of drain canals that parallel the river (e.g., the river is more likely to remain wetted where the elevation of the river is equal or lower than that of adjacent drain canals).

For each day that hydrologic conditions in the Rio Grande were monitored, a brief summary report was prepared documenting spatial and temporal observations of flow (measured and visual estimates) and longitudinal limits of running water conditions. These reports were distributed via e-mail to recipients of water operations conference call notes. Similarly, verbal reports of field observations were made during water operations conference calls. Records of observed and measured hydrologic conditions were kept for the duration of the observation period.

The first occurrence of river channel drying in the Isleta Reach was observed on September 10, 2014, whereas the first occurrence of channel drying in the San Acacia Reach was observed on June 19, 2014. The last occurrence of river channel drying in the Isleta Reach was observed on October 11, 2014. The last occurrence of river channel drying in the San Acacia Reach was observed on October 9, 2014.

Channel drying in the Isleta Reach was restricted to one river segment. This intermittent river segment was 3.44 miles long, extending downstream from a point 2.88 miles upstream of Peralta Wasteway (River Mile [RM] 155.38) to a point 0.56 mile downstream of the Peralta Wasteway (RM 151.94). Channel drying in the San Acacia Reach was restricted to a 22.17-mile segment that extended downstream from a point 1.97 miles upstream of Brown Arroyo (RM 95.97) to a point 0.10 mile upstream of the confluence of the Rio Grande and the pump channel at the south boundary of the Bosque del Apache National Wildlife Refuge (RM 73.8). Descriptive statistics

concerning the number of days the river dried in the Isleta and San Acacia reaches of the Middle Rio Grande during the 2014 irrigation season, and the extent and variability of that drying, are presented in Table 1 and Table 2 in this report.

Inclusive of the Isleta and San Acacia Reaches of the Middle Rio Grande, overland running water habitat was absent from 25.61 unique miles of river channel on one or more days during the 2014 irrigation season. The maximum total extent of river channel drying observed for a single day during the 2014 irrigation season (i.e., 24.92 miles) occurred on September 14, 2014, when a total of 2.75 miles of river in the Isleta Reach and 22.17 miles of river in the San Acacia Reach was dry or reduced to isolated pools.

Discharge measurements were performed at a variety of sites when it was judged safe to wade in the stream, when flowing water was present, and within anticipated budgetary constraints. Likewise, irrigation wasteways were surveyed to determine the amount of water being discharged to the Rio Grande when it was judged safe to wade in the wasteways, when flowing water was present, and within anticipated budgetary constraints.

Appended tables present an overview of discharge at all Middle Rio Grande U.S. Geological Survey gauges, as reported by the U.S. Army Corps of Engineers during morning conference calls (Appendix A). Appendix B presents a detailed account of spatial and temporal observations of hydrologic conditions, including longitudinal limits of running water conditions, along with measured and visual estimates of flow at select Middle Rio Grande U.S. Geological Survey sites and irrigation outfall locations. Appendix C presents a detailed record of Middle Rio Grande pumping operations. Records of the daily longitudinal extent of channel drying are visually represented in spreadsheets that provide a stylized representation of the Rio Grande at the half-mile scale (Appendix D). Finally, Appendix E provides project safety documentation.

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INTRODUCTION

The variability of flow characteristics of the contemporary Middle Rio Grande[1], resulting either from natural or regulated causes, imparts a patchiness of environmental types at the scale of river segments, including the extremes represented by hydrologic abundance and periodic discontinuity of flow, with a continuum of intermediate types between these extremes. Low flow conditions that often result in fish mortality have been linked to conditions of aridity, exacerbated by water diversion in the basin and episodic conditions of drought.

Real-time estimates of surface water discharge in the Middle Rio Grande are available at flow gauges maintained by the U.S. Geological Survey (USGS) (web accessible at http://waterdata.usgs.gov/nm/nwis/rt). Rough correlations about hydrologic conditions between gauges are possible at coarse scales of time and space. However, only coarse-scale patterns of autocorrelation exist in the temporal record of flow across the linear series of gauge stations because intervening flows are subject to infiltration, evaporation, diversion, and the potential addition of irrigation and wastewater returns. Fine-scale dynamics in hydrologic conditions cannot be accurately deduced or interpolated from measured flow in the consecutive series of USGS gauges, and continuous river conditions cannot be assured even when a consecutive series of flow gauges registers that overland flow exists. The absence of continuous flow may result in fish mortality, including the federal and state endangered Rio Grande silvery minnow (*Hybognathus amarus*; silvery minnow). On-site river monitoring is used to guide adjustments to daily water management operations to reduce mortality to the silvery minnow and other aquatic life that occupy running water habitats along the Middle Rio Grande.

The silvery minnow is currently listed as endangered by the State of New Mexico, having first been listed on May 25, 1979, as an endangered endemic population of the Mississippi silvery minnow (*Hybognathus nuchalis*) (New Mexico Department of Game and Fish 1988). On July 20, 1994, the U.S. Fish and Wildlife Service (USFWS) published a final rule to list the silvery minnow as a federal endangered species with proposed critical habitat (Federal Register 1994). The species is also listed as endangered by Texas (Sections 65.171–65.184 of Title 31 Texas Administrative Code) and the Republic of Mexico (Secretaria de Desarrollo Social 1994).

The contemporary range of the silvery minnow in the Middle Rio Grande of New Mexico (Figure 1) extends downstream from the vicinity of Bernalillo to the headwaters of Elephant Butte Reservoir, a distance that fluctuates as the size of the pool of water in storage in Elephant Butte Reservoir changes, but approximates 150 river miles. Prevailing aridity and highly variable hydrologic conditions in the Middle Rio Grande represent significant factors that challenge efforts to develop and manage the region's water resources for consumptive uses while simultaneously maintaining local fishery resources, notably including the silvery minnow.

[1] For reference in this document, the "Middle Rio Grande" is defined as the Rio Grande downstream from Cochiti Dam to the headwaters of Elephant Butte Reservoir. The Middle Rio Grande below Cochiti Dam is further designated by four reaches defined by locations of mainstream irrigation diversion dams. The Cochiti Reach extends from Cochiti Dam to Angostura Diversion Dam. The reach from Angostura Diversion Dam to Isleta Diversion Dam is called the Albuquerque Reach. The Isleta Reach is bounded upstream by Isleta Diversion Dam and downstream by San Acacia Diversion Dam. Finally, the reach below San Acacia Diversion Dam to the headwaters of Elephant Butte Reservoir is the San Acacia Reach.

This project, commonly known as "RiverEyes," is mandated by Reasonable and Prudent Alternative Element C of the 2003 Biological Opinion (USFWS 2003). RiverEyes monitoring must be performed when flows are less than 300 cubic feet per second (cfs) at San Acacia Diversion Dam. RiverEyes provides current information on river flows that allow action agencies to react quickly to rapidly changing conditions on the river, facilitate coordination among the agencies to prevent unexpected drying, and prepare for silvery minnow rescues.

Appended tables present an overview of discharge at all USGS gauges, as reported by the U.S. Army Corps of Engineers during morning conference calls (Appendix A). Appendix B presents a detailed account of spatial and temporal observations of hydrologic conditions, including longitudinal limits of running water conditions, along with measured and visual estimates of flow at select USGS sites and irrigation outfall locations. Appendix C presents a detailed record of Middle Rio Grande pumping operations. Records of the daily longitudinal extent of channel drying are visually represented in spreadsheets that provide a stylized representation of the Rio Grande at the half-mile scale (Appendix D). Finally, Appendix E provides project safety documentation.

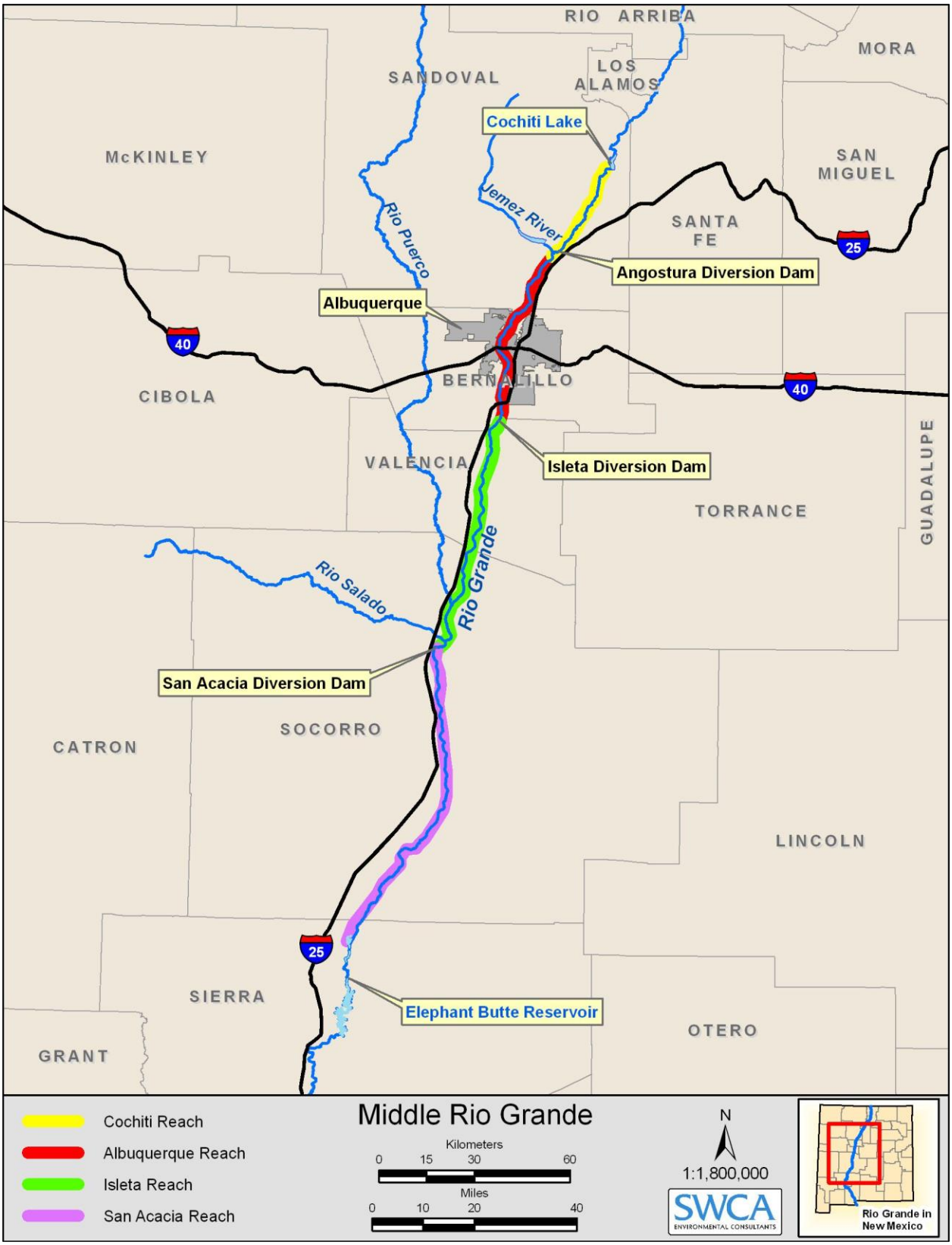

Figure 1. Overview of the Middle Rio Grande.

METHODS

Daily Reconnaissance

Under contract with the New Mexico Interstate Stream Commission, SWCA Environmental Consultants (SWCA) monitored hydrologic conditions daily from April 1 through June 30, 2014. There was a 9-day hiatus in observations from July 1 through 9, 2014, as a consequence of delay in executing a contract with the Bureau of Reclamation (Reclamation). Records of hydrologic conditions during this period of contract interruption were obtained from Water Operations Conference Call notes and the USFWS fish rescue crew. Under contract with Reclamation, hydrologic conditions were monitored daily from July 9 through October 31, 2014.

River reconnaissance was performed early enough in the day so that observations could be verbally relayed to water operations staff and fish rescue crews early in the morning (usually by about 5:00 a.m.). SWCA staff participated in early morning (8:30 a.m.) water operations conference calls to relay information concerning observed hydrologic conditions to concerned and affected stakeholders. Telephone reports were provided to designated Reclamation personnel and the USFWS Fish Rescue Coordinator (Thomas Archdeacon, or as appointed). A handheld global positioning system (GPS) unit was used to record spatial characteristics of receding and advancing edges of running water habitat. Point-specific location data were recorded using the Universal Transverse Mercator (UTM) system, North American Datum 1983, Zone 13. Point-specific location data were also recorded by fractions of river miles and were based on approximate mile-long segments superimposed on 2002 aerial photographs of the river by Pacific Western Technologies, Albuquerque, New Mexico.

Discharge Measurements

Discharge measurements were performed as time and budget constraints permitted when it was judged safe to wade in the river. Irrigation wasteways were surveyed within allotted time and budget constraints to determine the volume of water being discharged to the Rio Grande. Occasional discharge measurements were performed at other locations as requested by water operations or fish rescue personnel. Water depth (feet) and flow velocity (feet per second) were measured using a USGS top-setting wading rod fitted with a Marsh-McBirney Flo-Mate portable flow meter. Estimation of discharge (cfs) followed protocol specified by Marsh-McBirney Inc. (1990, 1994). Late afternoon follow-up reconnaissance was performed within the Isleta and San Acacia Reaches when requested by water operations or fish rescue personnel to determine hydrologic conditions. Telephone reports were provided to designated Reclamation personnel and the USFWS Fish Rescue Coordinator on an as needed basis.

Daily Reports

A daily summary report of observations was prepared and distributed via e-mail, and field observations were reported during water operations conference calls. The daily reports included information such as:

- observed river conditions for each location visited;
- visual estimates of flow rate;
- results of quantitative flow measurements;

- observations on the rate of drying/shrinkage if the river is actively receding;
- observations on the rate of rewetting if the river is advancing after a period of drying;
- observations of disconnected lateral pools; and
- forecasts of probable river conditions over the next 24 hours.

Data Management

A daily record of the longitudinal extent of river drying and rewetting was maintained. A relational database (Microsoft Access) and a spreadsheet database (Microsoft Excel) were developed for the storage, analysis, and retrieval of these data.

The logical construct of the relational database is helpful for envisioning the data collection and data analysis process across hierarchical scales of time and space. This contributes to a unified frame of reference for investigations at the scale of river reach, user-defined river segments, and point-location data. The logical construct of the relational database also is helpful for envisioning how measured hydrologic data and RiverEyes data can be interactively employed to produce a more comprehensive understanding of river dynamics.

Daily RiverEyes data recorded at the scale of river reach include observations of river drying (yes/no, total river miles dried, extent of expansive drying, and rewetting events). Also narrative accounts of daily observations exist as database entries. Point-location observations are recorded by river mile (tenths and sometimes hundredths of a river mile) and meter (Universal Transverse Mercator [UTM] coordinates, usually at a resolution less than 15 meters). Point-location data include observations of the upstream and downstream extent of river drying and observations of flow (measured and unmeasured estimates).

Data entry screens of the relational database incorporate logical data entry rules, along with queries designed to ease tasks of data validation at the time of data entry. The relational database queries provide much greater flexibility in selecting and sorting data than is possible with the limited sort and selection criteria of spreadsheet applications. The RiverEyes relational database provides numerous options for printing formatted reports, many of which have been anticipated as on-demand data outputs ranging from day-specific reports, range-of-date reports, reach-specific reports, and reports ordered chronologically by various search criteria, including reports ordered by extent of drying. The relational database also includes an automated report that searches for the maximum and minimum river miles and UTM coordinates of river drying—information crucial for recognizing expansive events of river recession (i.e., "new drying").

Safety

A Job Hazard Analysis (JHA) was performed for this project (see Appendix E). Personnel were required to certify that they reviewed and complied with the JHA requirements each day in which work was performed on the project. Vehicle inspections were conducted at the start of each day (see Appendix E for a copy of the vehicle inspection form). All personnel that operated all-terrain vehicles received safety instruction in their operation. All safety requirements were followed.

RESULTS

Daily Reconnaissance

Records were maintained of observed and measured hydrologic conditions over the duration of the monitoring period, the details of which accompany this report in various database formats (i.e., spreadsheet and relational databases; see Appendices A–D). A brief daily summary report of observations was prepared and distributed via e-mail to recipients of water operations conference call notes, and verbal reports of field observations were made during water operations conference calls.

Channel drying was restricted to the Isleta and San Acacia Reaches over the period of monitoring. The location and extent of channel drying varied within each reach over the period of monitoring in response to the magnitude and variance of in-stream flow, flow dynamics linked to localized and regional storm events, and out-of-channel diversion of water. The location and extent of channel drying also appear to vary with macrotopographic features of the river and its adjacent corridor. Notable among these features is the elevation of the streambed relative to that of adjacent segments of drain canals that parallel the river. The river is more likely to remain wetted where the elevation of the river is equal or lower than that of adjacent drain canals.

The first occurrence of river channel drying in the Isleta Reach was observed on September 10, 2014, whereas the first occurrence of channel drying in the San Acacia Reach was observed on June 19, 2014. The last occurrence of river channel drying in the Isleta Reach was observed on October 11, 2014. The last occurrence of river channel drying in the San Acacia Reach was observed on October 9, 2014.

Channel drying in the Isleta Reach was restricted to one river segment. This intermittent river segment was 3.44 miles long, extending downstream from a point 2.88 miles upstream of Peralta Wasteway (River Mile [RM] 155.38) to a point 0.56 miles downstream of the Peralta Wasteway (RM 151.94). Channel drying in the San Acacia Reach was restricted to a 22.17-mile segment that extended downstream from a point 1.97 miles upstream of Brown Arroyo (RM 95.97) to a point 0.10 mile upstream of the confluence of the Rio Grande and the pump channel at the south boundary of the Bosque del Apache National Wildlife Refuge (RM 73.8). Descriptive statistics concerning the number of days the river dried in the Isleta and San Acacia Reaches of the Middle Rio Grande during the 2014 irrigation season, and the extent and variability of that drying, are presented in Table 1 and Table 2.

Inclusive of the Isleta and San Acacia Reaches of the Middle Rio Grande, overland running water habitat was absent from 25.61 unique miles of river channel on one or more days during the 2014 irrigation season. The maximum total extent of river channel drying observed for a single day during the 2014 irrigation season (i.e., 24.92 miles) occurred on September 14, 2014, when a total of 2.75 miles of river in the Isleta Reach and 22.17 miles of river in the San Acacia Reach was dry or reduced to isolated pools. River reach- and month-specific mean or median values of the length of river channel without overland running water during the 2014 irrigation season are specified in Table 1 and Table 2, and illustrated in Figure 2 and Figure 3.

Table 1. Statistics Concerning the Occurrence and Extent of River Drying in the Isleta Reach during the 2014 Irrigation Season

	Monthly Statistics for Isleta Reach (2014)					
Month (2014)	**Days of Channel Drying**	**Mean Num. of River Miles Dry/Day**	**Std. Dev.**	**Std. Error**	**C.I. of Mean**	**Max. Num. of River Miles Dry**
April	0	0.000	0.000	0.000	0.000	0.000
May	0	0.000	0.000	0.000	0.000	0.000
June	0	0.000	0.000	0.000	0.000	0.000
July	0	0.000	0.000	0.000	0.000	0.000
August	0	0.000	0.000	0.000	0.000	0.000
September	12	0.919	1.227	0.224	0.458	3.440
October	11	0.866	1.189	0.214	0.436	2.720

C.I. = confidence interval.

Table 2. Statistics Concerning the Occurrence and Extent of River Drying in the San Acacia Reach during the 2014 Irrigation Season

	Monthly Statistics for San Acacia Reach (2014)					
Month (2014)	**Days of Channel Drying**	**Mean Num. of River Miles Dry/Day**	**Std. Dev.**	**Std. Error**	**C.I. of Mean**	**Max. Num. of River Miles Dry**
April	0	0.000	0.000	0.000	0.000	0.000
May	0	0.000	0.000	0.000	0.000	0.000
June	12	4.160	6.227	1.137	2.325	17.440
July	16	7.956	8.717	1.566	3.197	21.630
August	0	0.000	0.000	0.000	0.000	0.000
September	10	5.778	8.732	1.594	3.260	22.17
October	4	0.527	1.0459	0.262	0.535	5.400

C.I. = confidence interval.

River channel segments without running water during the 2014 irrigation season were generally much longer and more variable in the San Acacia Reach compared to the Isleta Reach (see Table 1 and Table 2). Drought conditions during the 2014 irrigation season were more severe in the San Acacia Reach compared to the Isleta Reach as is evident from the greater number of river miles dried and the duration of channel drying in the San Acacia Reach. Relative to the Isleta Reach, intermittent portions of the San Acacia Reach were more subject to short-term rewetting during the 2014 irrigation season. Rewetting of intermittent portions of the Middle Rio Grande can be linked primarily to occasional significant inputs of stormwater runoff from large contributing watersheds that are confluent with the Rio Grande a short distance upstream of the San Acacia Reach, notably including the Rio Salado and Rio Puerco. Additionally, stormwater runoff in San Pedro Arroyo, confluent with the Rio Grande near the Highway 380 crossing, contributed significantly to flow in the Rio Grande over short time intervals.

The box plots in Figure 2 indicate that the maximum extent of river channel drying in the Isleta Reach during the 2014 irrigation occurred during September. The maximum extent of river channel drying in the Isleta Reach during the 2014 irrigation season was reached on September 27, 2014. Beginning on October 11, 2014, the Rio Grande in the Isleta Reach was through-flowing over the duration of the irrigation season.

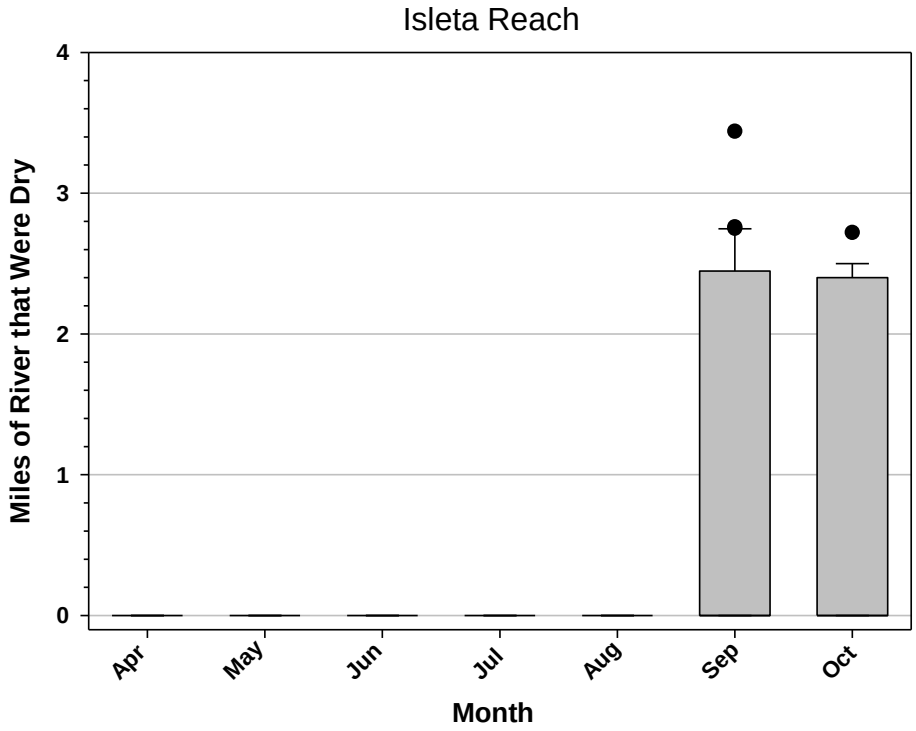

Figure 2. Occurrence and extent of river drying in the Isleta Reach of the Middle Rio Grande for April through October of the 2014 irrigation season.[2]

The box plots in Figure 3 indicate that the maximum extent and median values of river channel that dried in the San Acacia Reach during the 2014 irrigation season occurred in September. The maximum extent of river channel drying in the San Acacia Reach during the 2014 irrigation season was reached on September 14 and 15, 2014. The maximum extent of river channel drying was nearly identical during July and September. There was an insufficient number of records of river drying in the San Acacia Reach during August to compute the 5th, 10th, 90th and 95th percentiles (statistically requiring at least nine records). Beginning October 10, 2014, the Rio Grande in the San Acacia Reach was through-flowing over the duration of the irrigation season.

[2] The boundary of the box closest to zero indicates the 25th percentile. The line within the box marks the median, and the boundary of the box farthest from zero indicates the 75th percentile. Error bars above and below the box indicate the 90th and 10th percentiles, respectively. The circle symbols represent outlying points.

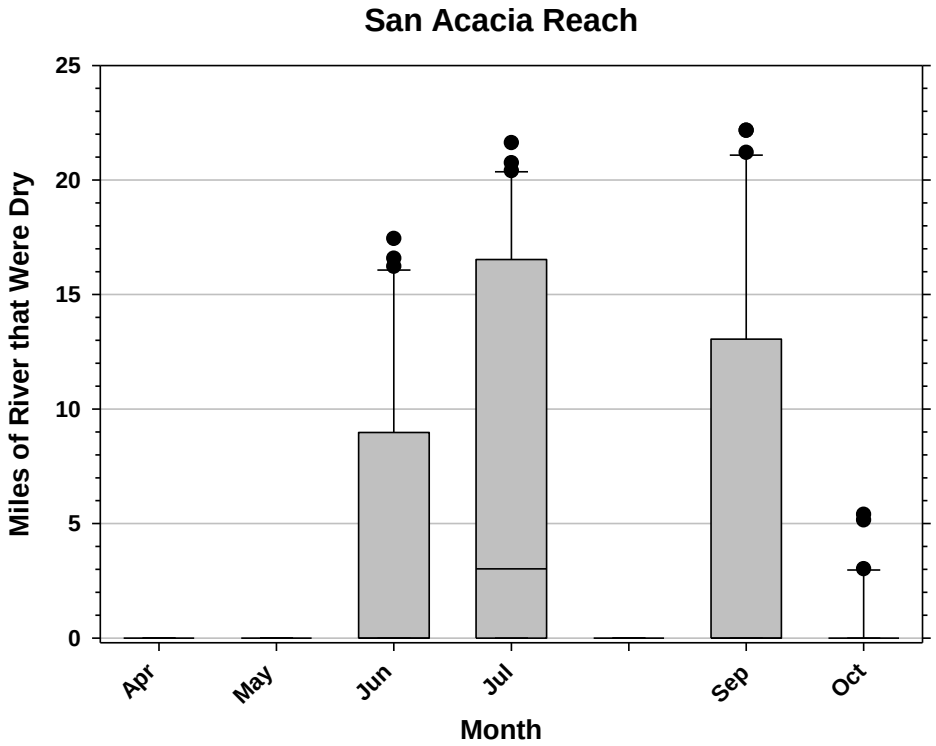

Figure 3. Occurrence and extent of river drying in the San Acacia Reach of the Middle Rio Grande for June through October of the 2014 irrigation season[3].

Probabilities of channel drying at a given point in the Isleta Reach (at the scale of 0.5 mile) are illustrated in Figure 4 (for April, May, and June 2014), Figure 5 (for July, August, and September 2014), and Figure 6 (for October 2014).

[3] The boundary of the box closest to zero indicates the 25th percentile. The line within the box marks the median, and the boundary of the box farthest from zero indicates the 75th percentile. Error bars above and below the box indicate the 90th and 10th percentiles, respectively. The circle symbols represent outlying points.

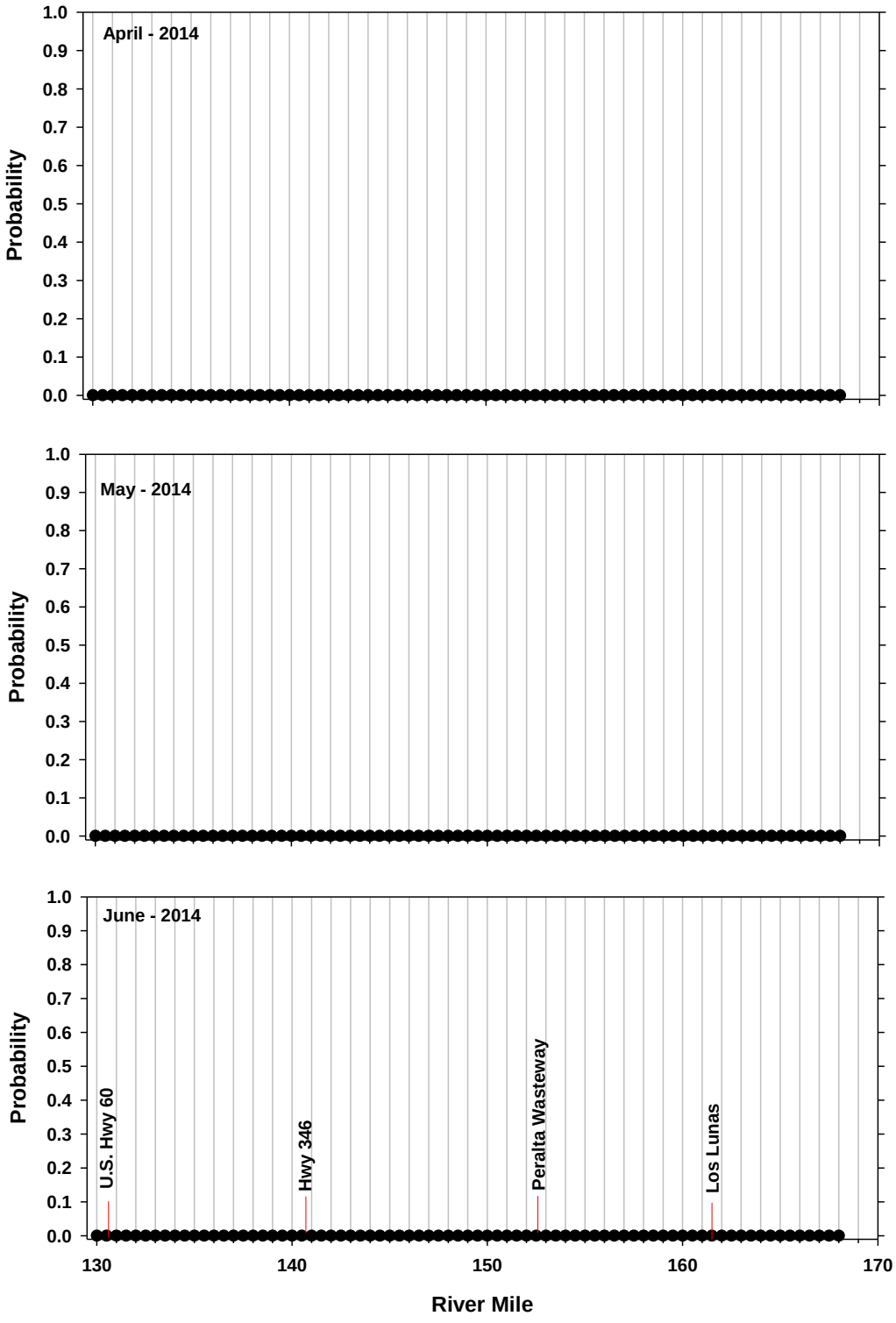

Figure 4. **Probabilities of river channel drying at a given point in the Isleta Reach (at the scale of 0.5 mile) for April, May, and June 2014. For reference, the location of select geographic features is indicated along the river mile axis.**

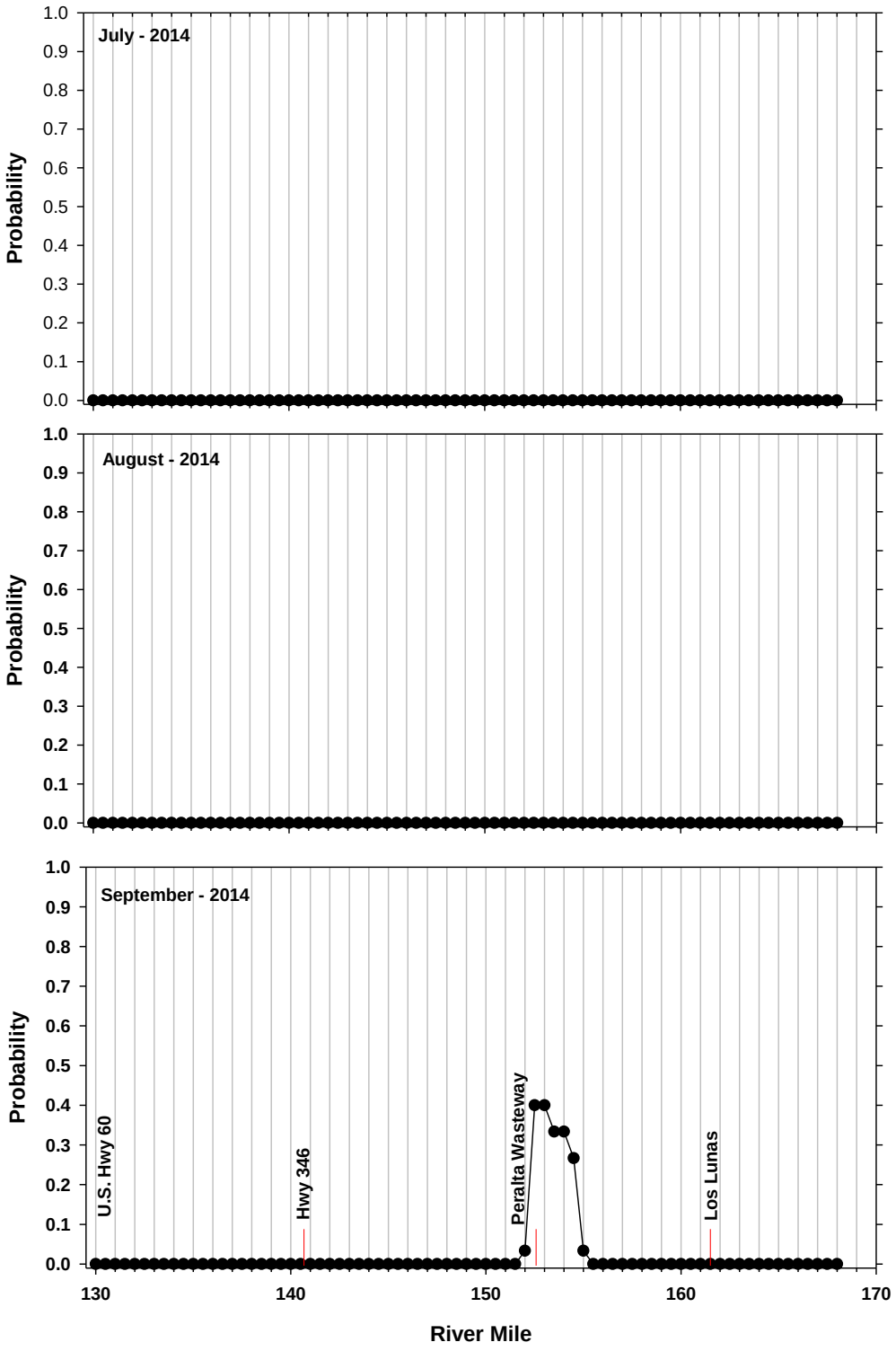

Figure 5. **Probabilities of river channel drying at a given point in the Isleta Reach (at the scale of 0.5 mile) for July, August, and September 2014. For reference, the location of select geographic features is indicated along the river mile axis.**

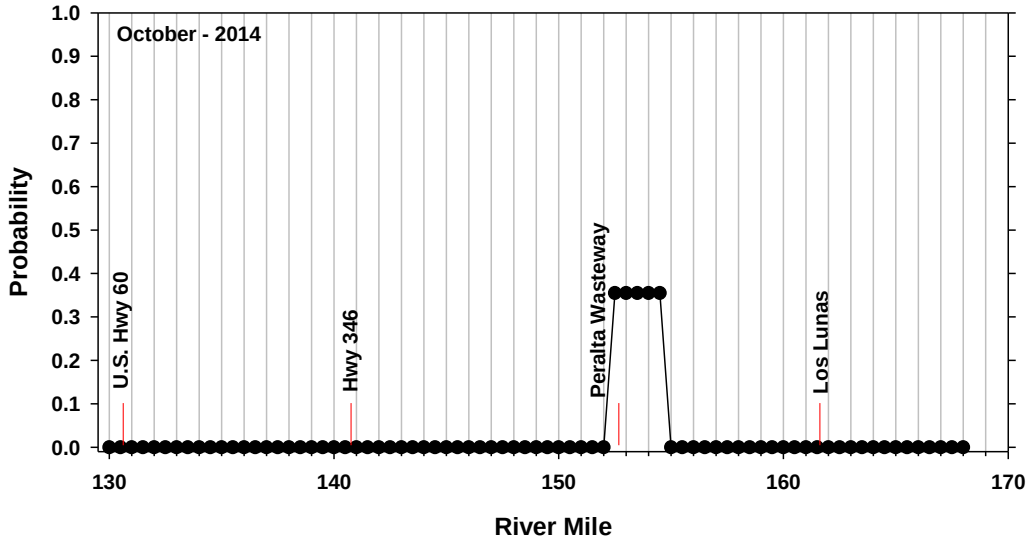

Figure 6. Probabilities of river channel drying at a given point in the Isleta Reach (at the scale of 0.5 mile) for October 2014. For reference, the location of select geographic features is indicated along the river mile axis.

The probabilities of channel drying at a given point in the San Acacia Reach (at the scale of 0.5 mile) are illustrated in Figure 7 (for April, May, and June 2014), Figure 8 (for July, August, and September 2014), and Figure 9 (for October 2014).

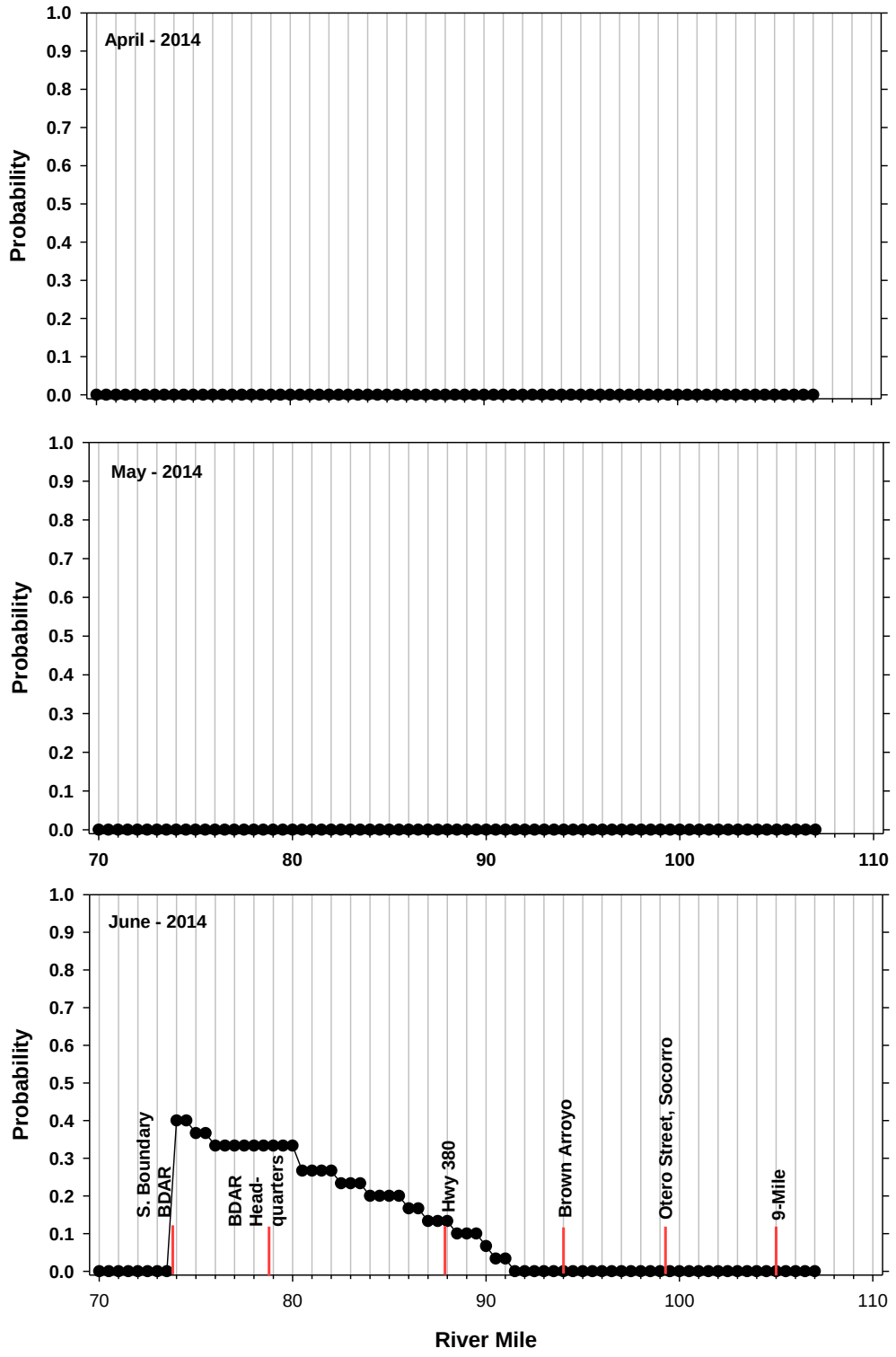

Figure 7. **Probabilities of river channel drying at a given point in the San Acacia Reach (at the scale of 0.5 mile) for April, May, and June 2014. For reference, the location of select geographic features is indicated along the river mile axis. Note: "BDAR" is an abbreviation for "Bosque del Apache Refuge."**

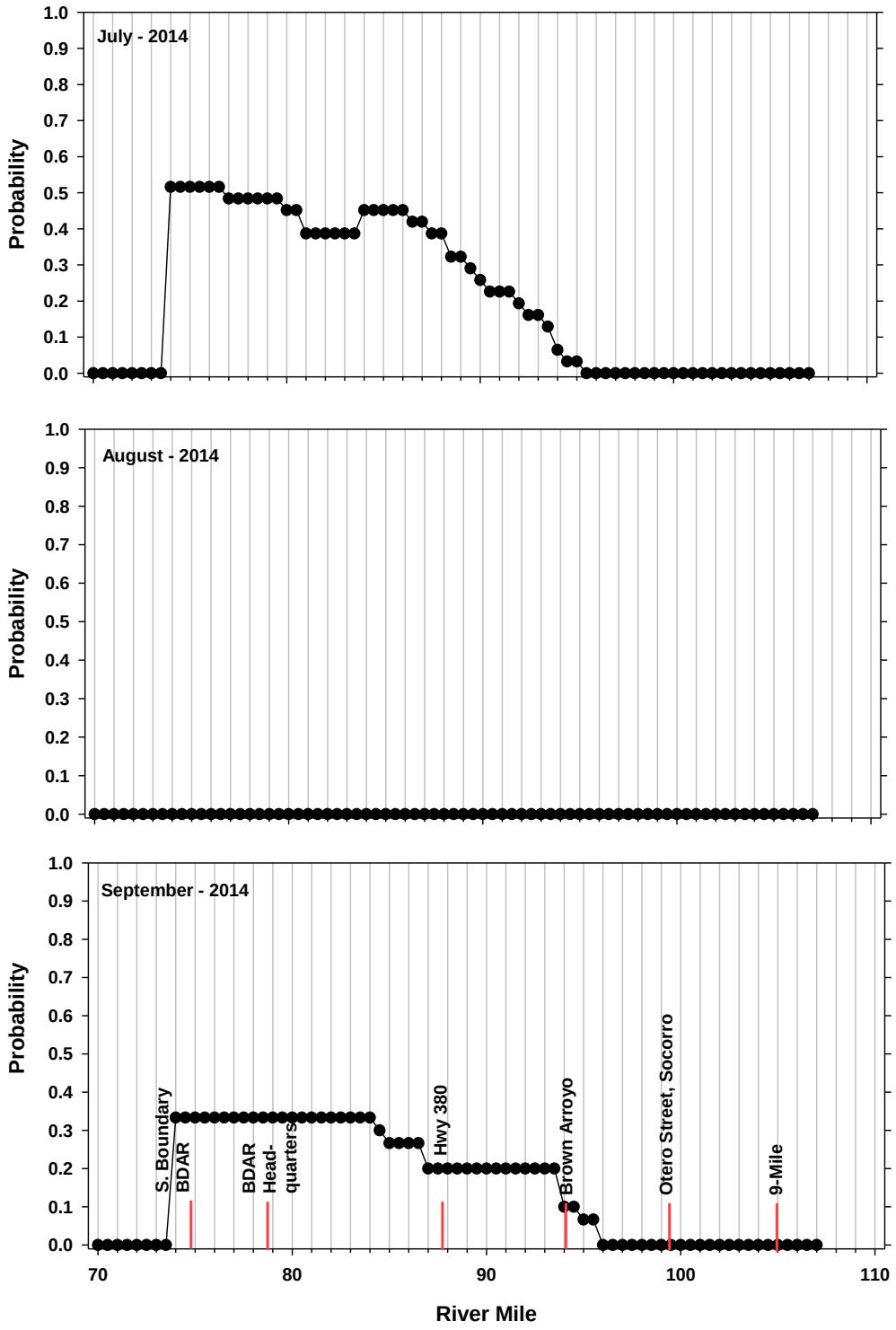

Figure 8. **Probabilities of river channel drying at a given point in the San Acacia Reach (at the scale of 0.5 mile) for July, August, and September 2014. For reference, the location of select geographic features is indicated along the river mile axis. Note: "BDAR" is an abbreviation for "Bosque del Apache Refuge."**

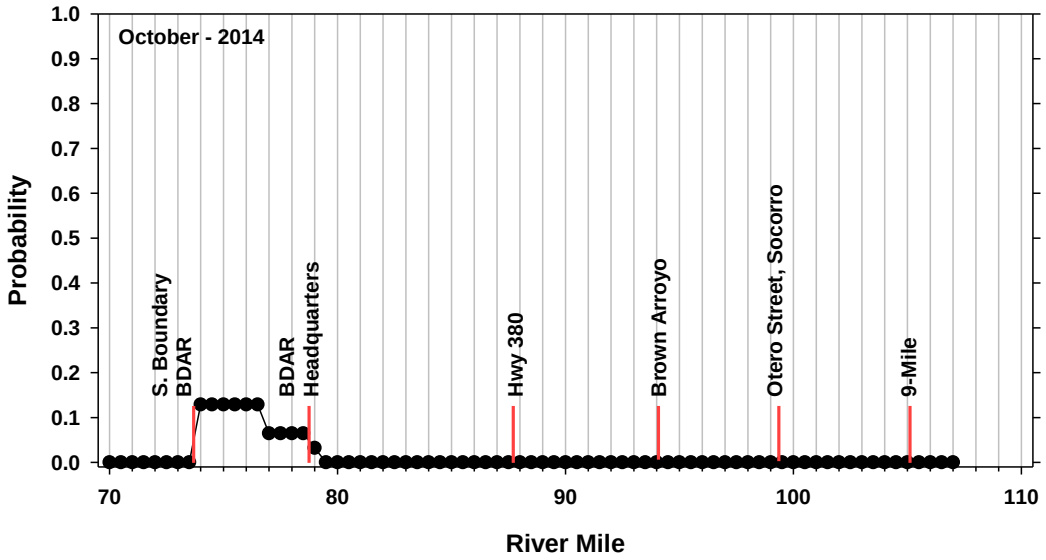

Figure 9. Probabilities of river channel drying at a given point in the San Acacia Reach (at the scale of 0.5 mile) for October 2014. For reference, the location of select geographic features is indicated along the river mile axis. Note: "BDAR" is an abbreviation for "Bosque del Apache Refuge."

The number of days half-mile segments of river were observed without overland running water during the 2014 irrigation season is illustrated in Figure 10 (Isleta Reach) and Figure 11 (San Acacia Reach). These figures indicate that one channel segment in the Isleta Reach is relatively abruptly subject to the onset and termination of channel desiccation. In the San Acacia Reach, the duration of channel desiccation increases gradually from north to south and terminates abruptly at the south boundary of Bosque del Apache National Wildlife Refuge where water is pumped from the low flow conveyance channel to the river to abruptly terminate channel desiccation. The maximum duration in which one or more half-mile segments of river were observed without overland running water during the 2014 irrigation season is 17 consecutive days in the Isleta Reach and 23 consecutive days in the San Acacia Reach (see Figure 10 and Figure 11).

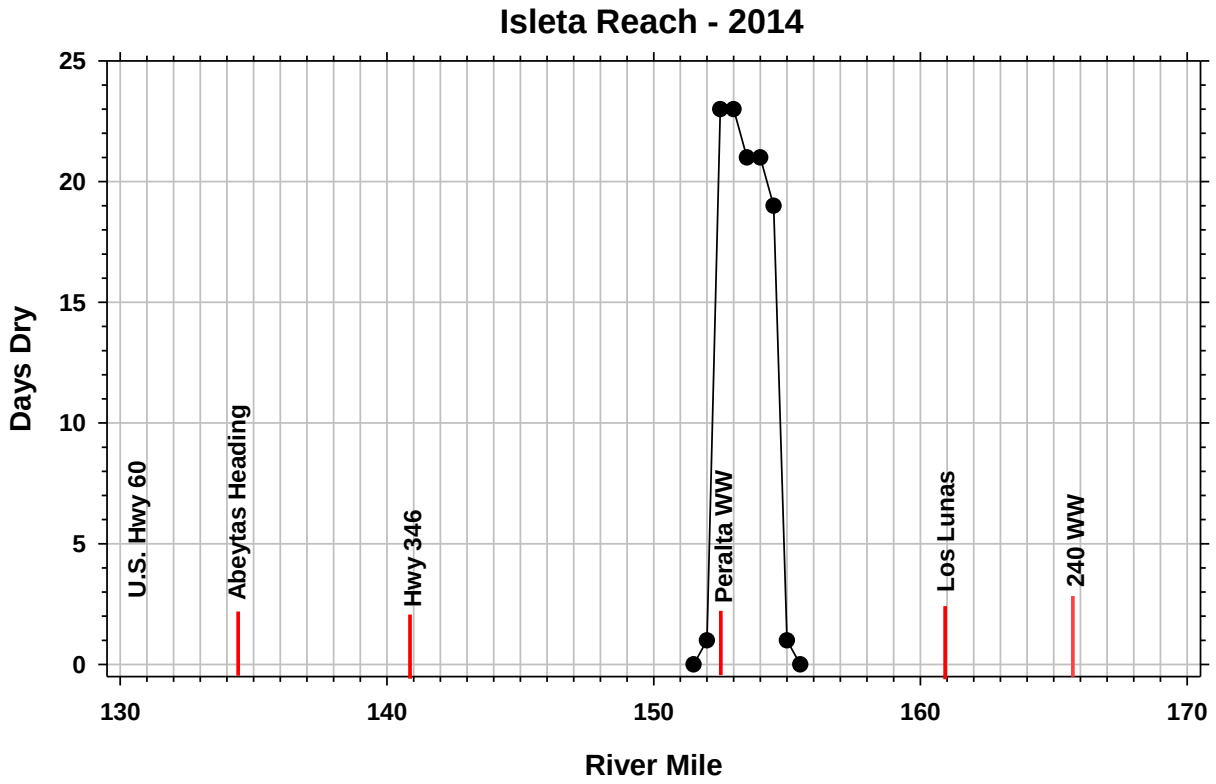

Figure 10. **The number of days that half-mile segments of the Isleta Reach of the Middle Rio Grande were observed without overland running water during the 2014 irrigation season. For reference, the location of select geographic features is indicated along the river mile axis. Note: "WW" is an abbreviation for "Wasteway."**

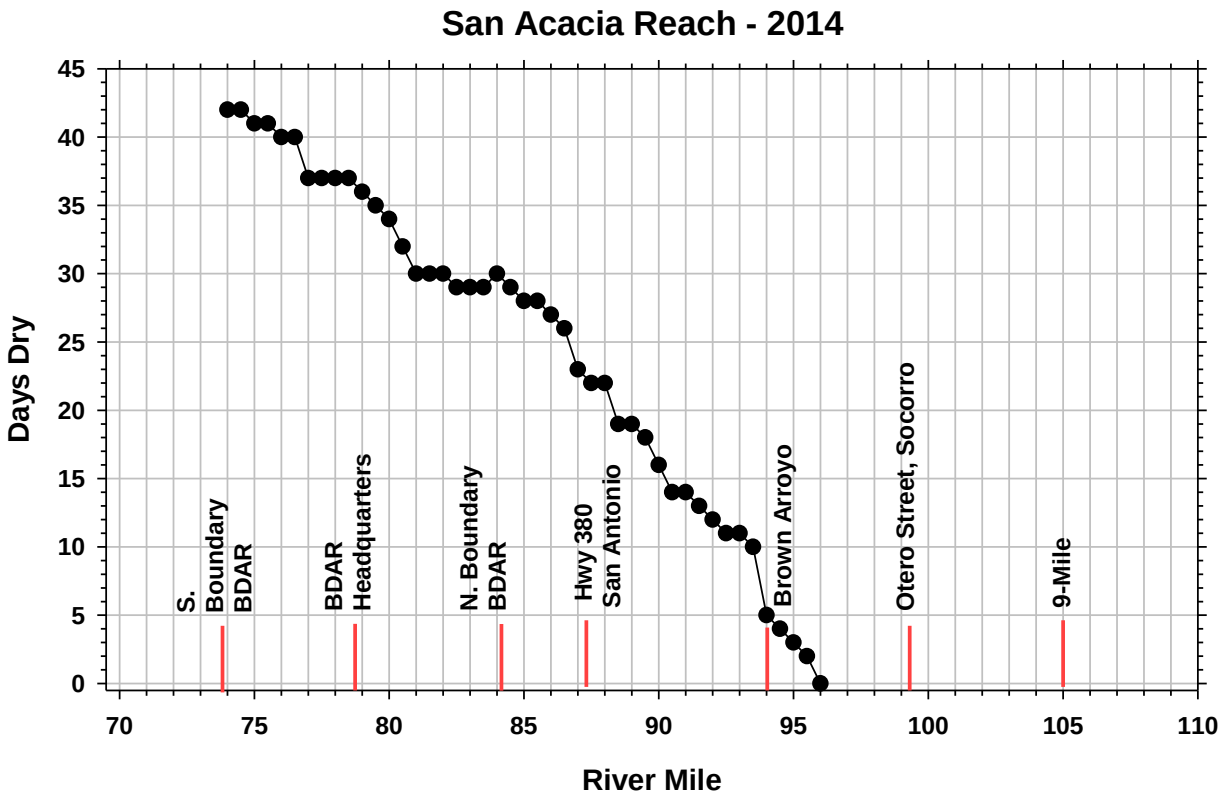

Figure 11. **The number of days that half-mile segments of the San Acacia Reach of the Middle Rio Grande were observed without overland running water during the 2014 irrigation season. For reference, the location of select geographic features is indicated along the river mile axis. Note: "BDAR" is an abbreviation for "Bosque del Apache Refuge."**

ACKNOWLEDGMENT AND CREDITS

Gregory Pargas was responsible for observations of river dynamics in the San Acacia Reach of the Middle Rio Grande. Michael Hatch developed and maintained database systems that generated much of the content of this report. The New Mexico Interstate Stream Commission funded this project from April 1 through June 30, 2014, while the Bureau of Reclamation funded this project from July 9 through October 31, 2014. We are grateful to the Middle Rio Grande Conservancy District for granting access to the Rio Grande and its adjacent riparian corridor within their respective jurisdictions.

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APPENDIX A.
OVERVIEW OF 2014 MIDDLE RIO GRANDE GAUGED RIVER FLOWS

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Middle Rio Grande Water Operations - 2014

Date	Del Norte	Lobatos	Embudo	Rio Grande at Embudo	La Puente	El Vado (DS of Dam)	Abiquiu (US of	Abiquiu (DS of	Chamita	Otowi	Cochiti (DS of	Galisteo	San Felipe	Jemez Springs	Jemez Spgs. (DS of Res)	Albuq.	Bosque Farms	Hwy. 346	Rio Puerco	San Acacia	Escondida	Hwy. 380	San Marcial	E. Butte (DS of Res)	Cabillo (DS of
24-Mar-2014	325	415	24	645	106	46	51	82	64	764	758	0	717	30	6	466	212	160	1	314	343	225	81	0	0
31-Mar-2014	390	460	15	694	131	50	57	84	92	810	747	0	728	39	13	430	191	105	1	176	188	89	71	0	0
02-Apr-2014	527	360	10	667	142	101	106	182	137	736	756	0	750	32	4	442	182	101	1	193	211	112	71	0	0
04-Apr-2014	413	230	15	563	135	127	139	279	263	852	766	0	773	45	23	418	208	121	1	196	200	80	53	0	0
07-Apr-2014	346	127	26	416	121	127	139	412	390	798	755	0	773	35	35	466	182	103	1	203	207	100	81	0	0
11-Apr-2014	813	115	10	333	405	194	200	417	404	719	758	0	796	52	4	412	200	94	1	150	191	70	63	0	0
14-Apr-2014	1187	107	39	365	532	311	322	609	675	1040	939	0	1060	82	63	576	209	92	1	145	174	69	56	0	0
16-Apr-2014	1030	145	43	369	476	316	325	503	579	852	949	0	1070	72	55	590	203	98	1	153	207	59	51	0	0
18-Apr-2014	1253	174	39	405	928	406	408	503	605	940	908	0	1100	52	54	543	206	101	0	173	219	77	63	0	0
21-Apr-2014	2554	230	78	465	1470	424	425	445	605	1030	1023	0	1100	102	69	715	165	101	0	179	239	87	72	0	0
24-Apr-2014	3268	306	99	640	1820	306	331	451	579	1040	1025	0	1170	66	60	698	224	141	0	205	235	82	79	0	0
25-Apr-2014	2644	294	124	688	1070	256	290	451	449	1180	1021	0	1120	57	37	690	195	139	0	198	243	124	84	2	0
28-Apr-2014	2144	170	112	568	686	300	325	451	397	1060	1011	0	1010	41	25	791	203	214	0	196	227	96	79	2	0
30-Apr-2014	1510	212	85	484	525	365	365	451	363	934	1055	0	994	61	39	706	200	180	0	391	354	158	130	2	0
02-May-2014	1231	223	63	494	469	406	398	456	363	947	1043	0	968	41	29	650	191	166	0	266	343	124	111	2	0
05-May-2014	2288	223	78	563	948	406	401	468	383	966	1031	0	968	52	44	619	191	166	0	176	333	131	118	2	0
07-May-2014	3173	177	110	568	978	521	492	1130	1100	1690	1034	0	955	54	38	597	187	116	0	176	168	85	88	1	0
09-May-2014	2554	167	132	553	662	514	495	1540	1670	2140	1960	0	1820	52	36	1510	813	146	0	184	171	62	58	1	0
12-May-2014	2144	142	118	503	518	521	495	1600	1630	2150	1969	0	1870	41	20	1620	1430	792	0	950	1040	674	464	2	0
14-May-2014	1622	234	128	533	476	528	495	1670	1790	2230	1970	0	1850	34	25	1510	1620	901	0	1140	978	908	1010	1	0
16-May-2014	1570	266	103	573	483	406	401	1320	1230	1830	1849	0	1760	30	24	1440	1160	821	0	1010	951	1060	1090	2	0
19-May-2014	3040	209	108	604	576	406	394	615	505	1080	1567	0	1370	24	2	1160	797	643	0	809	821	661	607	2	0
21-May-2014	3862	246	122	558	638	562	514	609	505	1050	1227	0	1220	14	1	698	429	437	0	633	593	459	537	2	0
23-May-2014	4170	310	200	721	703	555	533	635	554	1240	1113	0	1090	20	0	530	260	270	0	388	333	262	228	10	0

Date	Del Norte	Lobatos	Embudo	Rio Grande at Embudo	La Puente	El Vado (DS of Dam)	Abiquiu (US of	Abiquiu (DS of	Chamita	Otowi	Cochiti (DS of	Galisteo	San Felipe	Jemez Springs	Jemez Spgs. (DS of Res)	Albuq.	Bosque Farms	Hwy. 346	Rio Puerco	San Acacia	Escondida	Hwy. 380	San Marcial	E. Butte (DS of Res)	Cabillo (DS of
27-May-2014	3380	375	266	1150	561	202	231	200	237	1530	1642	0	1550	32	17	1190	721	498	0	646	520	434	204	10	2292
30-May-2014	5500	532	261	1030	695	202	224	297	273	1300	1629	0	1530	28	1	996	714	484	0	534	539	318	288	2280	1991
04-Jun-2014	4750	643	208	1450	469	443	499	497	433	1790	1963	0	1760	17	0	1440	280	177	0	196	204	80	136	2590	2280
06-Jun-2014	4190	258	165	1110	380	406	459	497	449	1550	1813	0	1700	11	1	1240	1040	643	0	522	329	82	79	2860	2350
09-Jun-2014	3300	350	198	880	285	295	368	596	596	1450	1517	0	1440	10	1	891	526	543	0	445	407	311	204	2850	2480
11-Jun-2014	2990	713	116	982	232	246	316	292	307	1130	1418	0	1370	7	0	845	486	385	0	283	243	194	185	2540	2390
13-Jun-2014	2900	601	89	952	196	246	319	292	252	1210	1285	0	1230	8	0	682	287	259	0	219	171	161	123	2580	2290
16-Jun-2014	2460	678	66	940	142	151	214	396	383	1240	1225	0	1140	8	0	626	224	157	0	183	168	78	62	2300	2280
18-Jun-2014	2290	526	50	910	100	155	204	391	325	1240	1208	0	1090	8	0	556	200	139	0	150	144	54	36	2260	2280
19-Jun-2014	2210	478	42	863	100	155	207	396	343	1130	1207	0	1100	9	0	543	195	133	0	160	155	42	27	2250	2270
20-Jun-2014	2110	380	38	863	94	151	204	602	529	1400	1210	0	1100	7	0	550	195	128	0	156	155	33	25	2240	2190
23-Jun-2014	2080	329	27	661	75	151	212	656	596	1160	1077	0	1100	4	0	604	247	141	0	143	150	27	23	2300	2270
25-Jun-2014	1760	400	22	677	63	151	202	577	554	1130	1166	0	1030	7	0	666	191	126	0	101	139	9	23	2280	2260
27-Jun-2014	1600	380	12	656	54	151	202	570	537	1100	1111	0	1030	5	0	563	142	107	0	77	95	0	23	2350	2250
30-Jun-2014	2035	552	73	1044	87	490	629	1077	1064	2126	1910	7	1914	135	634	1341	251	103	170	120	119	0	43	3580	3740
02-Jul-2014	1060	246	7	513	22	507	537	768	648	1130	1072	483	994	9	0	485	62	47	0	67	44	0	20	2350	2070
03-Jul-2014	1030	370	7	528	17	507	456	761	648	1410	1028	0	917	9	1	666	108	51	1	58	33	0	21	2110	1970
07-Jul-2014	732	460	10	672	30	605	537	321	331	993	910	0	843	10	1	517	169	124	0	112	100	0	20	2070	1780
09-Jul-2014	749	310	12	704	31	300	871	186	172	953	879	0	819	20	300	1010	99	86	0	103	65	0	23	1630	1670
11-Jul-2014	740	270	12	513	49	295	306	375	295	986	931	0	867	20	5	536	105	152	49	165	106	0	23	1620	1740
14-Jul-2014	749	274	63	484	49	300	350	386	390	1010	792	36	808	19	1	498	215	238	504	352	424	142	449	1620	1830
16-Jul-2014	624	489	40	598	236	300	1090	391	702	3000	798	2	843	80	103	938	551	144	457	280	191	131	150	1680	1750
18-Jul-2014	593	489	55	588	88	295	319	200	426	1750	1243	0	1320	24	26	996	1030	838	399	729	---	650	386	1690	1880
21-Jul-2014	544	339	33	614	54	300	308	189	376	953	742	0	1030	10	0	634	845	681	6	558	---	381	664	1750	1860
23-Jul-2014	485	306	31	513	41	295	305	270	228	858	777	0	942	7	0	658	108	152	0	217	---	294	479	1800	1850
25-Jul-2014	416	234	41	470	35	295	308	370	284	889	767	0	761	6	0	401	126	59	0	193	---	72	44	1810	1790
28-Jul-2014	586	198	14	416	38	295	319	609	497	1210	762	0	808	6	1	723	96	20	0	71	75	0	22	1810	1650

Date	Del Norte	Lobatos	Embudo	Rio Grande at Embudo	La Puente	El Vado (DS of Dam)	Abiquiu (US of	Abiquiu (DS of	Chamita	Otowi	Cochiti (DS of	Galisteo	San Felipe	Jemez Springs	Jemez Spgs. (DS of Res)	Albuq.	Bosque Farms	Hwy. 346	Rio Puerco	San Acacia	Escondida	Hwy. 380	San Marcial	E. Butte (DS of Res)	Cabillo (DS of
01-Aug-2014	672	355	42	1760	51	295	645	144	331	2000	952	755	1090	34	69	706	294	357	57	283	291	186	22	875	651
04-Aug-2014	640	329	63	694	68	300	347	141	210	864	1257	2	1460	53	55	1020	1440	1160	554	---	1600	761	---	1090	1064
06-Aug-2014	766	278	59	699	61	306	322	270	252	1010	996	72	1100	48	51	827	596	624	77	570	650	747	995	925	927
08-Aug-2014	608	282	41	533	46	300	310	321	546	846	770	0	917	34	20	563	425	433	13	601	441	470	520	925	1064
11-Aug-2014	517	170	24	479	37	285	299	244	776	741	709	0	880	27	50	479	169	221	1	499	273	392	241	32	695
13-Aug-2014	466	157	20	405	37	306	313	468	325	834	709	0	855	21	8	479	142	163	298	746	495	285	115	32	688
15-Aug-2014	544	163	28	405	44	316	313	491	397	870	727	0	784	33	34	448	99	86	24	476	319	118	259	15	681
18-Aug-2014	447	202	26	409	44	300	310	407	319	810	734	1	784	20	2	378	99	119	55	510	650	693	546	12	597
20-Aug-2014	398	163	16	402	37	300	305	311	237	693	701	0	773	22	4	340	94	61	188	340	163	77	98	2	420
22-Aug-2014	387	142	13	372	29	598	560	552	390	843	702	0	761	10	1	325	85	47	4	153	117	37	66	2	417
25-Aug-2014	403	163	13	369	38	406	408	622	505	969	851	0	831	16	0	407	88	66	68	190	150	46	109	1	91
27-Aug-2014	387	163	45	435	38	406	408	577	488	1090	850	9	855	16	0	472	88	37	5	107	191	693	245	1	0
29-Aug-2014	381	148	29	409	32	400	394	412	325	791	847	0	855	20	0	424	99	35	50	94	129	50	136	0	0
02-Sep-2014	332	107	12	340	26	591	568	570	472	850	818	0	831	9	0	418	108	31	2	60	53	20	65	0	0
05-Sep-2014	292	115	10	322	22	555	522	577	456	850	772	0	773	7	0	407	83	19	0	58	61	29	53	0	0
08-Sep-2014	324	127	10	319	20	612	576	570	488	850	791	0	761	11	0	412	80	16	0	46	51	3	30	0	0
10-Sep-2014	441	120	8	336	26	576	568	564	488	823	777	0	761	8	0	314	66	13	0	30	32	0	32	0	0
12-Sep-2014	403	122	9	329	30	805	820	662	546	863	770	0	761	9	0	304	66	11	2	20	25	0	25	0	0
15-Sep-2014	315	133	10	329	24	797	792	704	639	977	827	0	808	8	0	384	102	20	0	18	20	0	25	0	0
17-Sep-2014	303	136	10	376	16	261	276	391	449	705	752	0	773	6	0	351	53	15	135	81	45	47	76	0	0
19-Sep-2014	300	127	10	347	17	265	276	335	383	625	617	0	706	8	0	304	83	37	1	153	155	178	172	0	0
22-Sep-2014	345	105	7	319	16	265	274	266	313	543	458	0	591	9	0	238	62	22	0	97	127	147	44	0	0
24-Sep-2014	723	97	12	315	20	275	279	102	192	528	463	0	611	14	0	164	59	17	1480	---	286	265	165	0	0
26-Sep-2014	551	209	12	291	20	270	274	216	233	377	550	0	553	14	0	123	16	13	21	342	260	294	254	0	0
29-Sep-2014	1200	102	10	362	34	270	266	328	307	563	457	0	435	13	0	129	51	23	11	324	152	64	72	0	0
01-Oct-2014	1580	71	14	322	59	265	265	365	376	583	558	0	543	19	0	116	41	25	1	283	87	17	48	0	0
03-Oct-2014	1090	151	14	280	38	202	204	365	376	573	551	0	552	15	0	139	29	29	0	55	72	7	32	0	0

Date	Del Norte	Lobatos	Embudo	Rio Grande at Embudo	La Puente	El Vado (DS of Dam)	Abiquiu (US of	Abiquiu (DS of	Chamit	Otowi	Cochiti (DS of	Galisteo	San Felipe	Jemez Springs	Jemez Spgs. (DS of Res)	Albuq.	Bosque Farms	Hwy. 346	Rio Puerco	San Acacia	Escondida	Hwy. 380	San Marcial	E. Butte (DS of Res)	Cabillo (DS of
06-Oct-2014	920	258	13	457	31	198	204	316	343	625	513	0	515	14	0	136	48	26	0	55	68	10	30	0	0
08-Oct-2014	930	286	11	470	34	107	113	151	172	558	513	0	505	13	0	143	46	16	0	54	58	8	29	0	0
10-Oct-2014	880	325	16	513	61	110	252	128	210	747	534	0	524	24	192	164	42	30	0	54	63	22	30	0	0
14-Oct-2014	775	405	20	604	51	107	104	128	172	687	610	0	591	22	6	299	111	116	54	152	243	278	241	0	0
17-Oct-2014	680	306	23	583	43	87	83	100	107	642	714	0	695	20	0	401	115	189	4	74	191	124	79	0	0
20-Oct-2014	608	290	27	553	43	79	76	100	121	647	637	0	632	25	0	346	111	160	0	152	194	128	69	0	0
24-Oct-2014	608	320	22	523	44	79	74	100	92	583	605	0	611	20	0	346	96	69	8	101	132	147	100	0	0
27-Oct-2014	544	286	21	543	38	79	74	100	92	631	535	0	533	20	1	285	99	53	1	99	134	108	36	35	0
31-Oct-2014	472	262	20	498	37	76	74	94	97	604	574	0	543	18	2	330	178	98	0	230	144	118	66	0	0

APPENDIX B.
REPORT OF 2014 FLOW ESTIMATES AND LONGITUDINAL LIMITS OF RUNNING WATER CONDITIONS IN THE MIDDLE RIO GRANDE

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River Eyes Report - 2014

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
01-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	174.00 (174 - 174)	Measured	---	---	---	---	None
02-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	165.00 (165 - 165)	Measured	---	---	---	---	None
03-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	187.00 (187 - 187)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
04-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	187.00 (187 - 187)	Measured	---	---	---	---	None
05-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	182.00 (182 - 182)	Measured	---	---	---	---	None
06-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	165.00 (165 - 165)	Measured	---	---	---	---	None
07-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	161.00 (161 - 161)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
08-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	161.00 (161 - 161)	Measured	---	---	---	---	None
09-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	165.00 (165 - 165)	Measured	---	---	---	---	None
10-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	165.00 (165 - 165)	Measured	---	---	---	---	None
11-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	165.00 (165 - 165)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
12-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	165.00 (165 - 165)	Visual	---	---	---	---	None
13-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	165.00 (165 - 165)	Measured	---	---	---	---	None
14-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	174.00 (174 - 174)	Measured	---	---	---	---	None
15-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	165.00 (165 - 165)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
16-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	161.00 (161 - 161)	Measured	---	---	---	---	None
17-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	flow estimate	161.00 (161 - 161)	Measured	---	---	---	---	None
18-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	169.00 (169 - 169)	Visual	---	---	---	---	None
19-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	165.00 (165 - 165)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
20-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	169.00 (169 - 169)	Measured	---	---	---	---	None
21-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	206.00 (206 - 206)	Measured	---	---	---	---	None
22-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	209.00 (209 - 209)	Measured	---	---	---	---	None
23-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	231.00 (231 - 231)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
24-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	6:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	203.00 (203 - 203)	Measured	---	---	---	---	None
25-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	206.00 (206 - 206)	Measured	---	---	---	---	None
26-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	209.00 (209 - 209)	Measured	---	---	---	---	None
27-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	209.00 (209 - 209)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
28-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	209.00 (209 - 209)	Measured	---	---	---	---	None
29-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	323.00 (323 - 323)	Measured	---	---	---	---	None
30-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	206.00 (206 - 206)	Measured	---	---	---	---	None
01-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	203.00 (203 - 203)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
02-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	200.00 (200 - 200)	Measured	---	---	---	---	None
03-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	200.00 (200 - 200)	Measured	---	---	---	---	None
04-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	200.00 (200 - 200)	Measured	---	---	---	---	None
05-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	195.00 (195 - 195)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
06-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	191.00 (191 - 191)	Measured	---	---	---	---	None
07-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	195.00 (195 - 195)	Measured	---	---	---	---	None
08-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	195.00 (195 - 195)	Measured	---	---	---	---	None
09-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	911.00 (911 - 911)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
10-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	1120.00 (1120 - 1120)	Measured	---	---	---	---	None
11-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	1280.00 (1280 - 1280)	Measured	---	---	---	---	None
12-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	1480.00 (1480 - 1480)	Measured	---	---	---	---	None
13-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	1410.00 (1410 - 1410)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
14-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	1660.00 (1660 - 1660)	Measured	---	---	---	---	None
15-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	1210.00 (1210 - 1210)	Measured	---	---	---	---	None
16-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	1330.00 (1330 - 1330)	Measured	---	---	---	---	None
17-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	1210.00 (1210 - 1210)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
18-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	853.00 (853 - 853)	Measured	---	---	---	---	None
19-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	759.00 (759 - 759)	Measured	---	---	---	---	None
20-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	583.00 (583 - 583)	Measured	---	---	---	---	None
21-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	401.00 (401 - 401)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
22-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	257.00 (257 - 257)	Measured	---	---	---	---	None
23-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	257.00 (257 - 257)	Measured	---	---	---	---	None
24-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	277.00 (277 - 277)	Measured	---	---	---	---	None
25-May-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	551.00 (551 - 551)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
26-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	657.00 (657 - 657)	Measured	---	---	---	---	None
27-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	650.00 (650 - 650)	Measured	---	---	---	---	None
28-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	616.00 (616 - 616)	Measured	---	---	---	---	None
29-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	643.00 (643 - 643)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
30-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	671.00 (671 - 671)	Measured	---	---	---	---	None
31-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	526.00 (526 - 526)	Measured	---	---	---	---	None
01-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	327.00 (327 - 327)	Measured	---	---	---	---	None
02-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	308.00 (308 - 308)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
03-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	280.00 (280 - 280)	Measured	---	---	---	---	None
04-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	287.00 (287 - 287)	Measured	---	---	---	---	None
05-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	870.00 (870 - 870)	Measured	---	---	---	---	None
06-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	1010.00 (1010 - 1010)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
07-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	805.00 (805 - 805)	Measured	---	---	---	---	None
08-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	616.00 (616 - 616)	Measured	---	---	---	---	None
09-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	490.00 (490 - 490)	Measured	---	---	---	---	None
10-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	490.00 (490 - 490)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
11-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	459.00 (459 - 459)	Measured	---	---	---	---	None
12-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	342.00 (342 - 342)	Measured	---	---	---	---	None
13-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	273.00 (273 - 273)	Measured	---	---	---	---	None
14-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	212.00 (212 - 212)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
15-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	209.00 (209 - 209)	Measured	---	---	---	---	None
16-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	221.00 (221 - 221)	Measured	---	---	---	---	None
17-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	195.00 (195 - 195)	Measured	---	---	---	---	None
18-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	206.00 (206 - 206)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
19-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	203.00 (203 - 203)	Measured	---	---	---	---	None
	16:00	Rio Grande, 0.92 miles upstream of the confluence with Peralta Wasteway (RM 153.45)	Flow estimate	130.00 (130 - 130)	Visual	---	---	---	---	None
	15:30	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	12:30	Rio Grande at Abeytas Heading (RM 134.24)	Flow estimate	100.00 (100 - 100)	Visual	---	---	---	---	None
20-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	200.00 (200 - 200)	Measured	---	---	---	---	None
21-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	209.00 (209 - 209)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
22-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	212.00 (212 - 212)	Measured	---	---	---	---	None
23-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	227.00 (227 - 227)	Measured	---	---	---	---	None
24-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	200.00 (200 - 200)	Measured	---	---	---	---	None
25-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	200.00 (200 - 200)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
26-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	161.00 (161 - 161)	Measured	---	---	---	---	None
	10:30	Rio Grande 0.92 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	155.00 (150 - 160)	Visual	---	---	---	---	None
	10:05	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Discharge estimate	9.00 (8 - 10)	Visual	---	---	---	---	Internet posting is 0 at this time.
27-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	157.00 (157 - 157)	Measured	---	---	---	---	None
28-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	142.00 (142 - 142)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
29-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	131.00 (131 - 131)	Measured	---	---	---	---	None
	8:30	Rio Grande, 0.92 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Continuous flow	NA Visual	---	---	---	---	None	
	8:15	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	77.57 (77.57 - 77.57)	Measured	---	---	---	---	None
	8:50	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	9:50	Rio Grande at Abeytas Heading (RM 134.3)	Discharge estimate	105.00 (100 - 110)	Visual	---	---	---	---	None
	10:30	Rio Grande at Hwy 60 (RM 130.6)	Discharge estimate	65.00 (60 - 70)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
30-Jun-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	128.00 (128 - 128)	Measured	---	---	---	---	None
	8:05	Rio Grande, 0.92 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	40.00 (40 - 40)	Visual	---	---	---	---	Flow in two channels
	8:15	Rio Grande, 0.19 miles upstream of the confluence with Peralta Wasteway (RM 152.69)	Flow estimate	38.90 (38.9 - 38.9)	Measured	---	---	---	---	None
	7:00	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Discharge estimate	11.00 (10 - 12)	Visual	---	---	---	---	None
01-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	115.00 (115 - 115)	Measured	---	---	---	---	None
02-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	111.00 (111 - 111)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
03-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	111.00 (111 - 111)	Measured	---	---	---	---	None
04-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	138.00 (138 - 138)	Measured	---	---	---	---	None
05-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.									
	2:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	377.00 (377 - 377)	Measured	---	---	---	---	None
06-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.									
	8:00	Rio Grande at Hwy 346 USGS Gauge (RM 140.83)	Flow estimate	174.00 (174 - 174)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
07-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.								
	8:00	Rio Grande at Hwy 346 USGS Gauge (RM 140.83)	Flow estimate	149.00 (149 - 149)	Measured	---	---	---	---	None
08-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.								
	15:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	99.00 (99 - 99)	Measured	---	---	---	---	None
09-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	99.00 (99 - 99)	Visual	---	---	---	---	None
10-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	301.00 (301 - 301)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
11-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	105.00 (105 - 105)	Measured	---	---	---	---	None
	7:28	Rio Grande, 0.92 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	45.00 (40 - 50)	Visual	---	---	---	---	Continuous flow in two channels
	7:10	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Wasteway discharge estimate	12.50 (10 - 15)	Visual	---	---	---	---	Internet posted flow indicated 4.0 cfs at this time.
12-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	365.00 (365 - 365)	Measured	---	---	---	---	None
	5:35	Rio Puerco near I-25 (RM 126.6)	Flow estimate	48.00 (48 - 48)	Measured	---	---	---	---	None
	11:30	Rio Salado near I-25 (RM 118.83)	Flow estimate	30.00 (30 - 30)	Visual	---	---	---	---	None
13-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	291.00 (291 - 291)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
14-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	215.00 (215 - 215)	Measured	---	---	---	---	None
15-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	108.00 (108 - 108)	Measured	---	---	---	---	None
	7:10	Rio Grande 0.14 miles upstream of Peralta Wasteway (RM 152.64)	Flow estimate	105.00 (100 - 110)	Visual	---	---	---	---	None
	6:50	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Wasteway discharge estimate	27.50 (25 - 30)	Visual	---	---	---	---	Internet posting shows 4.0 cfs
16-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	468.00 (468 - 468)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
17-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	861.00 (861 - 861)	Measured	---	---	---	---	None
18-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings. No field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	963.00 (963 - 963)	Measured	---	---	---	---	None
19-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous in the Isleta Reach based on USGS flow measures.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	767.00 (767 - 767)	Measured	---	---	---	---	None
20-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous in the Isleta Reach based on USGS flow measures.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	886.00 (886 - 886)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
21-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the Isleta Reach based on USGS flow measures.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	759.00 (759 - 759)	Measured	---	---	---	---	None
22-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the Isleta Reach based on USGS flow measures.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	247.00 (247 - 247)	Measured	---	---	---	---	None
23-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the Isleta Reach based on USGS flow measures and field observations.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	108.00 (108 - 108)	Measured	---	---	---	---	None
	6:55	Rio Grande, 0.92 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	74.27 (74.27 - 74.27)	Measured	---	---	---	---	None
	6:05	Rio Grande at Peralta Wasteway (RM 152.5)	Discharge estimate	13.50 (12 - 15)	Visual	---	---	---	---	Internet showed 12 cfs discharge.

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
24-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous in the Isleta Reach based on USGS flow measures and field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	102.00 (102 - 102)	Measured	---	---	---	---	None
	6:55	Rio Grande, 0.92 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	110.00 (100 - 120)	Visual	---	---	---	---	None
25-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous in the Isleta Reach based on USGS flow measures.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	108.00 (108 - 108)	Measured	---	---	---	---	None
26-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous in the Isleta Reach based on USGS flow measures and field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	96.00 (96 - 96)	Measured	---	---	---	---	None
	6:35	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	95.00 (90 - 100)	Visual	---	---	---	---	None
	6:05	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Flow estimate	19.00 (18 - 20)	Visual	---	---	---	---	Internet indicated 2.0 cfs

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
27-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	94.00 (94 - 94)	Measured	---	---	---	---	None
	5:55	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	47.17 (47.17 - 47.17)	Measured	---	---	---	---	None
	5:05	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Wasteway Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	14:00	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	80.03 (80.03 - 80.03)	Measured	---	---	---	---	None
28-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	96.00 (96 - 96)	Measured	---	---	---	---	None
	6:05	Rio Grande, 0.91 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	12.50 (10 - 15)	Visual	---	---	---	---	None
	5:55	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Wasteway Discharge Estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	5:14	Rio Grande at Abeytas Heading (RM 134.23)	Wasteway Discharge Estimate	25.00 (20 - 30)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
29-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	94.00 (94 - 94)	Measured	---	---	---	---	None
	5:15	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	20.00 (20 - 20)	Visual	---	---	---	---	None
30-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. There are no field observations for the day.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	115.00 (115 - 115)	Visual	---	---	---	---	None
31-Jul-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	417.00 (417 - 417)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
01-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	263.00 (263 - 263)	Measured	---	---	---	---	None
02-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	2120.00 (2120 - 2120)	Measured	---	---	---	---	None
03-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	2160.00 (2160 - 2160)	Measured	---	---	---	---	None
04-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	1480.00 (1480 - 1480)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
05-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	911.00 (911 - 911)	Measured	---	---	---	---	None
06-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	576.00 (576 - 576)	Measured	---	---	---	---	None
07-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	477.00 (477 - 477)	Measured	---	---	---	---	None
08-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	417.00 (417 - 417)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
09-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	280.00 (280 - 280)	Measured	---	---	---	---	None
10-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	273.00 (273 - 273)	Measured	---	---	---	---	None
11-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	178.00 (178 - 178)	Measured	---	---	---	---	None
12-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	227.00 (227 - 227)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
13-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. There are no field observations for the day.								
	15:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	99.00 (99 - 99)	Measured	---	---	---	---	None
14-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	102.00 (102 - 102)	Measured	---	---	---	---	None
15-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	99.00 (99 - 99)	Measured	---	---	---	---	None
	5:45	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	119.19 (119.19 - 119.19)	Measured	---	---	---	---	None
	5:05	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Wasteway discharge estimate	17.50 (15 - 20)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
16-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	99.00 (99 - 99)	Measured	---	---	---	---	None
	7:00	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	49.50 (49.5 - 49.5)	Measured	---	---	---	---	None
	6:00	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Wasteway discharge estimate	32.50 (30 - 35)	Visual	---	---	---	---	None
17-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 116.08)	Flow estimate	102.00 (102 - 102)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
18-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	99.00 (99 - 99)	Measured	---	---	---	---	None
	17:15	Rio Grande 0.11 miles upstream of Los Chavez Wasteway (RM 156.89)	Flow estimate	55.50 (55.5 - 55.5)	Measured	---	---	---	---	None
	6:15	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	33.46 (33.46 - 33.46)	Measured	---	---	---	---	None
	5:45	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Wasteway discharge estimate	27.50 (25 - 30)	Visual	---	---	---	---	None
19-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	88.00 (88 - 88)	Measured	---	---	---	---	None
	5:45	Rio Grande, 0.11 miles upstream of the Los Chavez Wasteway (RM 156.89)	Flow estimate	50.97 (50.97 - 50.97)	Measured	---	---	---	---	None
	7:30	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	25.65 (25.65 - 25.65)	Measured	---	---	---	---	None
	7:15	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Wasteway discharge estimate	17.50 (15 - 20)	Visual	---	---	---	---	Internet indicated 10 cfs at this time

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
20-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	99.00 (99 - 99)	Measured	---	---	---	---	None
	6:00	Rio Grande, 0.91 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	16.29 (16.29 - 16.29)	Measured	---	---	---	---	None
	6:45	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	17.50 (15 - 20)	Visual	---	---	---	---	None
	7:00	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Wasteway discharge estimate	32.04 (32.04 - 32.04)	Measured	---	---	---	---	Internet indicated 19 cfs at this time

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
21-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	78.00 (78 - 78)	Measured	---	---	---	---	None
	5:25	Rio Grande, 0.91 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	19.08 (19.08 - 19.08)	Measured	---	---	---	---	None
	6:15	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway RM 152.64)	Flow estimate	17.50 (15 - 20)	Visual	---	---	---	---	None
	7:15	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Irrigation discharge estimate	7.45 (7.45 - 7.45)	Measured	---	---	---	---	Internet indicated 6.0 cfs at this time

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
22-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	85.00 (85 - 85)	Measured	---	---	---	---	None
	6:00	Rio Grande, 0.91 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	21.00 (21 - 21)	Measured	---	---	---	---	None
	6:30	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	19.00 (18 - 20)	Visual	---	---	---	---	None
	5:30	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Flow estimate	22.50 (20 - 25)	Visual	---	---	---	---	Internet indicated 15 cfs at this time.
23-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	5:40	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	17.70 (17.7 - 17.7)	Measured	---	---	---	---	None
	5:00	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Flow estimate	27.50 (25 - 30)	Visual	---	---	---	---	Internet indicated 14 cfs at this time.
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 116.08)	Flow estimate	99.00 (99 - 99)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
24-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	85.00 (85 - 85)	Measured	---	---	---	---	None
	5:45	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	15.97 (15.97 - 15.97)	Measured	---	---	---	---	None
	5:00	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Flow estimate	27.50 (25 - 30)	Visual	---	---	---	---	Internet indicated 20 cfs at this time.
25-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	85.00 (85 - 85)	Measured	---	---	---	---	None
	6:15	Rio Grande, 0.91 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	11.00 (10 - 12)	Visual	---	---	---	---	None
	5:30	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	10.39 (10.39 - 10.39)	Measured	---	---	---	---	None
	6:45	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Flow estimate	15.31 (15.31 - 15.31)	Measured	---	---	---	---	Internet indicated 9.0 cfs at this time

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
26-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	91.00 (91 - 91)	Measured	---	---	---	---	None
	6:15	Rio Grande, 0.91 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	9.00 (8 - 10)	Visual	---	---	---	---	None
	5:30	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	8.65 (8.65 - 8.65)	Measured	---	---	---	---	None
	6:45	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	Internet indicated 0.0 cfs at this time
27-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at USGS Bosque Farms Gauge (RM 166.08)	Flow estimate	88.00 (88 - 88)	Measured	---	---	---	---	None
	5:30	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	40.00 (35 - 45)	Visual	---	---	---	---	None
	5:45	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	Internet indicated 0 cfs at this time
	6:45	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	50.26 (50.26 - 50.26)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
28-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at USGS Bosque Farms Gauge (RM 166.08)	Flow estimate	102.00 (102 - 102)	Measured	---	---	---	---	None
	7:20	Rio Grande, 0.14 miles upstream of the confluence with the Peralta Wasteway (RM 152.64)	Flow estimate	14.19 (14.19 - 14.19)	Measured	---	---	---	---	None
	7:00	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Flow estimate	0.00 (0 - 0)	Visual	---	---	---	---	Internet indicated 0 cfs at this time
	8:30	Lower Peralta Riverside Drain (LP1DR) (RM 149.6)	Flow estimate	0.00 (0 - 0)	Visual	---	---	---	---	Internet indicated 0 cfs at this time
	7:45	Rio Grande at Belen Bridge (RM 149.5)	Flow estimate	20.00 (15 - 25)	Visual	---	---	---	---	None
	5:45	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	26.53 (26.53 - 26.53)	Measured	---	---	---	---	None
29-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at USGS Bosque Farms Gauge (RM 166.08)	Flow estimate	99.00 (99 - 99)	Measured	---	---	---	---	None
	7:00	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	28.43 (28.43 - 28.43)	Measured	---	---	---	---	None
	6:50	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Flow estimate	27.50 (25 - 30)	Visual	---	---	---	---	Internet indicated 28 at this time
	5:30	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	28.54 (28.54 - 28.54)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
30-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at USGS Bosque Farms Gauge (RM 166.08)	Flow estimate	94.00 (94 - 94)	Measured	---	---	---	---	None
	6:00	Rio Grande, 0.91 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	17.50 (15 - 20)	Visual	---	---	---	---	None
	5:30	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	14.56 (14.56 - 14.56)	Measured	---	---	---	---	None
	6:30	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Flow estimate	1.04 (1.04 - 1.04)	Measured	---	---	---	---	Internet indicated 9.0 cfs at this time
	7:15	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	44.61 (44.61 - 44.61)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
31-Aug-2014		**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.								
	8:00	Rio Grande at USGS Bosque Farms Gauge (RM 166.08)	Flow estimate	91.00 (91 - 91)	Measured	---	---	---	---	None
	8:45	Rio Grande at the Los Lunas Bridge (RM 161.4)	Flow estimate	30.00 (20 - 40)	Visual	---	---	---	---	None
	6:15	Rio Grande, 0.91 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	7.50 (5 - 10)	Visual	---	---	---	---	None
	5:40	Rio Grande, 0.14miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	7.67 (7.67 - 7.67)	Measured	---	---	---	---	None
	7:00	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Flow estimate	0.00 (0 - 0)	Visual	---	---	---	---	Internet indicated "NA" at this time
	7:40	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	29.94 (29.94 - 29.94)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
01-Sep-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the USGS Bosque Farms Gauge (RM 166.08)	Flow estimate	99.00 (99 - 99)	Measured	---	---	---	---	None
	5:15	Rio Grande 0.11 miles upstream of Los Chavez Wasteway (RM 156.89)	Flow estimate	35.00 (30 - 40)	Visual	---	---	---	---	None
	7:30	Rio Grande 3.8 miles upstream of Peralta Wasteway (RM 156.3)	Flow estimate	25.00 (20 - 30)	Visual	---	---	---	---	None
	7:15	Rio Grande 0.91 miles upstream of Peralta Wasteway (RM 153.42)	Flow estimate	7.50 (5 - 10)	Visual	---	---	---	---	None
	6:30	Rio Grande 0.14 miles upstream of Peralta Wasteway (RM 152.64)	Flow estimate	6.81 (6.81 - 6.81)	Measured	---	---	---	---	None
	6:15	Peralta Wasteway at the confluence with the Rio Grande (RM 152.5)	Flow estimate	1.50 (1 - 2)	Visual	---	---	---	---	Internet indicated "NA": at this time
	8:30	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	19.74 (19.74 - 19.74)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
02-Sep-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at USGS Bosque Farms Gauge (RM 166.08)	Flow estimate	108.00 (108 - 108)	Measured	---	---	---	---	None
	6:10	Rio Grande, 0.14 miles upstream of Peralta Wasteway (RM 152.64)	Flow estimate	6.60 (6.6 - 6.6)	Measured	---	---	---	---	None
	5:40	Peralta Wasteway at confluence with Rio Grande (RM 152.5)	Discharge estimate	6.00 (5 - 7)	Visual	---	---	---	---	Internet indicated 4.0 cfs at this time
	7:10	Rio Grande at Abeytas Heading (RM 134.23)	Discharge estimate	12.50 (10 - 15)	Visual	---	---	---	---	None
03-Sep-2014	**General Comments:** Flow in the main channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	6:15	Rio Grande, 0.91 miles upstream of Peralta Wasteway (RM 153.42)	Flow estimate	9.00 (8 - 10)	Visual	---	---	---	---	None
	5:30	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	9.28 (9.28 - 9.28)	Measured	---	---	---	---	None
	5:40	Peralta Wasteway (RM 152.5)	Discharge estimate	7.50 (5 - 10)	Visual	---	---	---	---	Internet indicated 5 cfs at this time
	7:10	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	28.08 (28.08 - 28.08)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
04-Sep-2014	**General Comments:** Flow in the main channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	6:00	Rio Grande, 0.91 miles upstream of Peralta Wasteway (RM 153.42)	Flow estimate	5.50 (4 - 7)	Visual	---	---	---	---	None
	5:30	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	4.44 (4.44 - 4.44)	Measured	---	---	---	---	None
	5:40	Peralta Wasteway (RM 152.5)	Discharge estimate	2.50 (2 - 3)	Visual	---	---	---	---	Internet indicated 2 cfs at this time
	7:15	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	17.12 (17.12 - 17.12)	Measured	---	---	---	---	None
05-Sep-2014	**General Comments:** Flow in the main channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	6:00	Rio Grande, 0.91 miles upstream of Peralta Wasteway (RM 153.42)	Flow estimate	8.50 (7 - 10)	Visual	---	---	---	---	None
	5:30	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	8.26 (6.72 - 9.79)	Measured	---	---	---	---	None
	7:00	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	Internet indicated 0 cfs at this time
	7:30	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	12.65 (12.65 - 12.65)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
06-Sep-2014	**General Comments:** Flow in the main channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	6:00	Rio Grande, 0.91 miles upstream of Peralta Wasteway (RM 153.42)	Flow estimate	6.00 (5 - 7)	Visual	---	---	---	---	None
	5:25	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	5.32 (5.32 - 5.32)	Measured	---	---	---	---	None
	6:45	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	Internet indicated 0 cfs at this time
	7:25	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	11.44 (11.44 - 11.44)	Measured	---	---	---	---	None
07-Sep-2014	**General Comments:** Flow is the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations									
	7:08	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	5.80 (5.8 - 5.8)	Measured	---	---	---	---	None
	6:45	Peralta Wasteway (RM 152.5)	Flow estimate	0.00 (0 - 0)	Visual	---	---	---	---	Internet indicated 0 cfs at this time
	5:45	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	9.38 (9.38 - 9.38)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
08-Sep-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	15.00 (15 - 15)	Visual	---	---	---	---	None
	7:15	Peralta Wasteway (RM 152.5)	Discharge estimate	5.00 (5 - 5)	Visual	---	---	---	---	None
	6:45	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	12.50 (10 - 15)	Visual	---	---	---	---	None
09-Sep-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	8:00	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	9.50 (7 - 12)	Visual	---	---	---	---	None
	6:30	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	10.00 (10 - 10)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
10-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 1.14 mile segment in the Isleta Reach. River is reduced to isolated pools over a 1.14-mile segment extending south from a point 1.14 miles upstream of Peralta Wasteway (RM 153.64) to Peralta Wasteway (RM 152.5). This represents new drying. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	8:00	Rio Grande, 1.14 miles upstream of Peralta Wasteway (RM 153.64)	Top of river drying	0.00 (0 - 0)	Visual	3841917	339641	---	---	None
	7:45	Rio Grande at Peralta Wasteway (RM 152.5)	Bottom of river drying	0.00 (0 - 0)	Visual	---	---	3840192	340084	None
	10:00	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	8.00 (8 - 8)	Visual	---	---	---	---	None
11-Sep-2014	**General Comments:**	Some 1.14 miles rewet since yesterday. Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.								
	15:30	Rio Grande, 1.14 miles upstream of Peralta Wasteway (RM 153.64)	Flow estimate	7.00 (7 - 7)	Visual	---	---	---	---	None
	10:00	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	5.00 (5 - 5)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
12-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 1.85 mile segment in the Isleta Reach. River is reduced to isolated pools over a 1.85-mile segment extending south from a point 1.85 miles upstream of Peralta Wasteway (RM 154.35) to Peralta Wasteway (RM 152.5). Of this segment, 0.71 miles represents new drying. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	6:30	Rio Grande 1.85 miles upstream of Peralta Wasteway (RM 154.35)	Top of river drying	0.00 (0 - 0)	Visual	3842789	340185	---	---	None
	6:05	Rio Grande at Peralta Wasteway (RM 152.5)	Bottom of river drying	0.00 (0 - 0)	Visual	---	---	3840192	340084	None
	5:30	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	5.00 (5 - 5)	Visual	---	---	---	---	None
13-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.55 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.55-mile segment extending south from a point 2.55 miles upstream of Peralta Wasteway (RM 155.05) to Peralta Wasteway (RM 152.5). Of this segment, 0.70 miles represents new drying. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	6:30	Rio Grande 2.55 miles upstream of Peralta Wasteway (RM 155.05)	Top of river drying	0.00 (0 - 0)	Visual	3843716	340581	---	---	None
	5:15	Rio Grande at Peralta Wasteway (RM 152.5)	Bottom of river drying	0.00 (0 - 0)	Visual	---	---	3840192	340084	None
	4:30	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	5.00 (5 - 5)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
14-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.75 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.75-mile segment extending south from a point 2.75 miles upstream of Peralta Wasteway (RM 155.25) to Peralta Wasteway (RM 152.5). Of this segment, 0.20 miles represents new drying. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	4:40	Rio Grande 2.75 miles upstream of Peralta Wasteway (RM 155.25)	Top of river drying. At the top of river drying, 0.20 miles represents new drying	0.00 (0 - 0)	Visual	3844012	340806	---	---	None
	3:59	Peralta Wasteway (RM 152.5)	Discharge estimate	15.00 (15 - 15)	Visual	---	---	---	---	None
	4:00	Rio Grande at Peralta Wasteway (RM 152.5)	Bottom of river drying	0.00 (0 - 0)	Visual	---	---	3840192	340084	None
	6:10	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	5.00 (5 - 5)	Visual	---	---	---	---	None
15-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.47 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.47-mile segment extending south from a point 2.47 miles upstream of Peralta Wasteway (RM 154.97) to Peralta Wasteway (RM 152.5). Some 0.28 miles of river rewet since yesterday. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	3:37	Rio Grande 2.47 miles upstream of Peralta Wasteway (RM 154.97)	Top of river drying. Some 0.28 miles of river rewet since yesterday.	0.00 (0 - 0)	Visual	3843581	340602	---	---	None
	3:00	Rio Grande at Peralta Wasteway (RM 152.5)	Bottom of river drying	0.00 (0 - 0)	Visual	---	---	3840192	340084	None
	3:01	Peralta Wasteway (RM 152.5)	Flow estimate	5.00 (5 - 5)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
16-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 1.98 mile segment in the Isleta Reach. River is reduced to isolated pools over a 1.98 mile segment extending south from a point 1.7 miles upstream of Peralta Wasteway (RM 154.2) to a point 0.28 miles downstream of Peralta Wasteway (RM 152.22). Some 0.77 miles of river rewet since yesterday at the top of river drying. Some 0.28 miles of river dried at the bottom of river drying that represents "new drying." Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	6:10	Rio Grande 1.7 miles upstream of Peralta Wasteway (RM 154.2)	Top of river drying. Some 0.77 miles of river rewet since yesterday.	0.00 (0 - 0)	Visual	3842659	339987	---	---	None
	5:10	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	5:20	Rio Grande at 0.28 miles downstream of Peralta Wasteway (RM 152.22)	Bottom of river drying. Some 0.28 miles of river dried at the bottom of river drying that represents "new drying."	0.00 (0 - 0)	Visual	---	---	3839834	340326	None
	7:50	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	12.50 (10 - 15)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
17-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations. Since yesterday, 1.98 miles of river have rewet.								
	5:30	Rio Grande, 0.91 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	2.50 (2 - 3)	Visual	---	---	---	---	None
	4:45	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	2.50 (2 - 3)	Visual	---	---	---	---	None
	4:30	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	7:00	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	11.00 (10 - 12)	Visual	---	---	---	---	None
	5:30	Rio Puerco near I-25 (RM 126.6)	Flow estimate	109.00 (109 - 109)	Measured	---	---	---	---	USGS posted flow
	12:00	Rio Salado near I-25 (RM 118.83)	Flow estimate	300.00 (300 - 300)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
18-Sep-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	5:15	Rio Grande, 0.91 miles upstream of the confluence with Peralta Wasteway (RM 153.42)	Flow estimate	4.00 (3 - 5)	Visual	---	---	---	---	None
	4:45	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	2.17 (2.17 - 2.17)	Measured	---	---	---	---	None
	4:30	Peralta Wasteway (RM 152.5)	Flow estimate	35.00 (30 - 40)	Visual	---	---	---	---	Internet posting indicated 36 cfs at this time
19-Sep-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	4:30	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	45.45 (45.45 - 45.45)	Measured	---	---	---	---	None
	4:20	Peralta Wasteway (RM 152.5)	Discharge estimate	2.50 (2 - 3)	Visual	---	---	---	---	Internet indicated 3 cfs at this time

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
20-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.								
	4:20	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	26.85 (26.85 - 26.85)	Measured	---	---	---	---	None
	4:15	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	Internet indicated 0 cfs at this time
21-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande, 0.91 miles upstream of Peralta Wasteway (RM 153.42)	Flow estimate	2.50 (2 - 3)	Visual	---	---	---	---	None
	17:30	Rio Grande, 0.91 miles upstream of Peralta Wasteway (RM 153.42)	Flow estimate	4.00 (3 - 5)	Visual	---	---	---	---	None
	4:30	Rio Grande 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	2.50 (2 - 3)	Visual	---	---	---	---	None
	17:15	Rio Grande 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	4.00 (3 - 5)	Visual	---	---	---	---	None
	4:15	Peralta Wasteway (RM 152.5)	Flow estimate	2.50 (2 - 3)	Visual	---	---	---	---	Internet indicated 2 cfs at this time
	17:00	Peralta Wasteway (RM 152.5)	Flow estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	6:00	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	17.50 (15 - 20)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
22-Sep-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande, 0.91 miles upstream of Peralta Wasteway (RM 153.42)	Flow estimate	3.50 (3 - 4)	Visual	---	---	---	---	None
	4:30	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	1.00 (1 - 1)	Visual	---	---	---	---	None
	4:00	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
23-Sep-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande, 0.91 miles upstream of Peralta Wasteway (RM 153.42)	Flow estimate	4.50 (4 - 5)	Visual	---	---	---	---	None
	4:30	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	2.50 (2 - 3)	Visual	---	---	---	---	None
	4:20	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	4:45	Rio Grande, 0.28 miles upstream of the confluence with Peralta Wasteway (RM 152.22)	Flow estimate	1.50 (1 - 2)	Visual	---	---	---	---	None
	6:15	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	22.50 (20 - 25)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
24-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.								
	5:20	Rio Grande, 0.91 miles upstream of Peralta Wasteway (RM 153.42)	Flow estimate	3.50 (3 - 4)	Visual	---	---	---	---	None
	4:45	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	1.00 (1 - 1)	Visual	---	---	---	---	None
	4:20	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	4:30	Rio Grande, 0.28 miles upstream of the confluence with Peralta Wasteway (RM 152.22)	Flow estimate	2.00 (2 - 2)	Visual	---	---	---	---	None
	6:45	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	17.50 (15 - 20)	Visual	---	---	---	---	None
	5:00	Rio Puerco near I-25 (RM 126.6)	Flow estimate	1380.00 (1380 - 1380)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
25-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 0.9 mile segment in the Isleta Reach. River is reduced to isolated pools over a 0.9-mile segment extending south from a point 1.04 miles upstream of Peralta Wasteway (RM 153.54) to a point 0.14 miles upstream of Peralta Wasteway (RM 152.64). This river segment had dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	5:45	Rio Grande, 1.04 miles upstream of Peralta Wasteway (RM 153.54)	Top of river drying	0.00 (0 - 0)	Visual	3841714	339647	---	---	None
	4:45	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Bottom of river drying	0.00 (0 - 0)	Visual	---	---	3840465	340027	None
	6:30	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	7:00	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	10.00 (8 - 12)	Visual	---	---	---	---	None
	5:00	Rio Puerco near I-25 (RM 126.6)	Flow estimate	222.00 (222 - 222)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
26-Sep-2014		**General Comments:**	The river is dry or reduced to isolated pools over a 2.76 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.76-mile segment extending south from a point 2.46 miles upstream of Peralta Wasteway (RM 154.98) to a point 0.28 miles downstream of Peralta Wasteway (RM 152.22). This river segment had dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.							
	3:33	Rio Grande, 2.48 miles upstream of Peralta Wasteway (RM 154.98)	Top of river drying. Some 1.44 miles have dried at the top of drying since yesterday.	0.00 (0 - 0)	Visual	3843595	340603	---	---	None
	3:00	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	4:15	Rio Grande, 0.28 miles downstream of the confluence with Peralta Wasteway (RM 152.22)	Bottom of river drying. Some 0.42 miles have dried at the bottom of river drying since yesterday.	0.00 (0 - 0)	Visual	---	---	3839834	340330	None
	5:20	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	12.50 (10 - 15)	Visual	---	---	---	---	None
	5:00	Rio Puerco near I-25 (RM 126.69)	Flow estimate	23.00 (23 - 23)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
27-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 3.44 mile segment in the Isleta Reach. River is reduced to isolated pools over a 3.44-mile segment extending south from a point 2.88 miles upstream of Peralta Wasteway (RM 155.38) to a point 0.56 miles downstream of Peralta Wasteway (RM 151.94). Some 0.68 miles of river have dried since yesterday. Of this drying, 0.41 miles (0.13 miles at the top of drying, and 0.28 miles at the bottom of drying) represents "new drying" (i.e., portions of river not previously dried this year). Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	3:35	Rio Grande, 2.88 miles upstream of Peralta Wasteway (RM 155.38)	Top of river drying. Some 0.4 miles have dried at the top of drying since yesterday. Of this drying, 0.13 miles represents new drying.	0.00 (0 - 0)	Visual	3844201	340846	---	---	None
	3:00	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	4:20	Rio Grande, 0.56 miles downstream of the confluence with Peralta Wasteway (RM 151.94)	Bottom of river drying. Some 0.28 miles have dried at the top of drying since yesterday. Of this drying, 0.28 miles represents new drying.	0.00 (0 - 0)	Visual	---	---	3839340	340403	None
	5:40	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	12.50 (10 - 15)	Visual	---	---	---	---	None
	5:00	Rio Puerco near I-25 (RM 126.6)	Flow estimate	5.90 (5.9 - 5.9)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
28-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.72 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.72-mile segment extending south from a point 2.72 miles upstream of Peralta Wasteway (RM 155.22) to Peralta Wasteway (RM 152.5). Some 0.16 miles of river rewet upstream of Peralta Wasteway and some 0.56 miles of river rewet downstream of Peralta Wasteway since yesterday. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	4:20	Rio Grande, 2.72 miles upstream of Peralta Wasteway (RM 155.22)	Top of river drying. Some 0.16 miles have rewet at the top of drying since yesterday.	0.00 (0 - 0)	Visual	3843992	340782	---	---	None
	3:50	Peralta Wasteway (RM 152.5)	Discharge estimate	17.50 (15 - 20)	Visual	---	---	---	---	None
	4:45	Rio Grande at Peralta Wasteway (RM 152.5)	Bottom of river drying. Some 0.56 miles have rewet at the bottom of drying since yesterday.	0.00 (0 - 0)	Visual	---	---	3840192	340084	None
	6:00	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	7.50 (5 - 10)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
29-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.56 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.56-mile segment extending south from a point 2.62 miles upstream of Peralta Wasteway (RM 155.12) to a point 0.06 miles upstream of Peralta Wasteway (RM 152.56). Some 0.10 miles of river rewet at the "top of river drying" upstream of Peralta Wasteway and some 0.06 miles of river rewet at the "bottom of river drying" upstream of Peralta Wasteway since yesterday. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	4:20	Rio Grande, 2.62 miles upstream of Peralta Wasteway (RM 155.12)	Top of river drying. Some 0.10 miles have rewet at the top of drying since yesterday.	0.00 (0 - 0)	Visual	3843833	340725	---	---	None
	4:45	Rio Grande, 0.06 miles upstream of Peralta Wasteway (RM 152.56)	Bottom of river drying. Some 0.06 miles have rewet at the bottom of drying since yesterday.	0.00 (0 - 0)	Visual	---	---	3840124	340170	None
	3:50	Peralta Wasteway (RM 152.5)	Discharge estimate. Very little surface flow remains in the river downstream of the wasteway.	0.00 (0 - 0)	Visual	---	---	---	---	None
	6:15	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	17.50 (15 - 20)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
30-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.44 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.44-mile segment extending south from a point 2.5 miles upstream of Peralta Wasteway (RM 155.0) to a point 0.06 miles upstream of Peralta Wasteway (RM 152.56). Some 0.12 miles of river rewet at the "top of river drying" upstream of Peralta Wasteway. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	4:25	Rio Grande, 2.5 miles upstream of Peralta Wasteway (RM 155)	Top of river drying. Some 0.12 miles have rewet at the top of drying since yesterday.	0.00 (0 - 0)	Visual	3843763	340626	---	---	None
	5:00	Rio Grande, 0.06 miles upstream of Peralta Wasteway (RM 152.56)	Bottom of river drying. This location is where "bottom of river drying" was yesterday morning.	0.00 (0 - 0)	Visual	---	---	3840124	340170	None
	3:50	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	6:15	Rio Grande at Abeytas Heading (RM 134.23)	Flow estimate	10.00 (8 - 12)	Visual	---	---	---	---	None
01-Oct-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.72 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.72-mile segment extending south from a point 2.72 miles upstream of Peralta Wasteway (RM 155.22) to a point opposite of Peralta Wasteway (RM 152.50). Some 0.22 miles of river dried at the "top of river drying." Some 0.06 miles have dried at bottom of drying since yesterday. This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	3:33	Rio Grande, 2.72 miles upstream of Peralta Wasteway (RM 155.22)	Top of river drying. Some 0.22 miles have dried at the top of drying since yesterday.	0.00 (0 - 0)	Visual	3843971	340745	---	---	None
	3:00	Peralta Wasteway (RM 152.5)	Discharge estimate	12.50 (10 - 15)	Visual	---	---	---	---	None
	3:01	Rio Grande, at the confluence with Peralta Wasteway (RM 152.5)	Bottom of river drying. Some 0.06 miles have dried at the bottom of drying since yesterday.	0.00 (0 - 0)	Visual	---	---	3840192	340084	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
02-Oct-2014	**General Comments:**	River is reduced to isolated pools over a 2.5-mile segment extending south from a point 2.5 miles upstream of Peralta Wasteway (RM 155.0) to a point opposite of Peralta Wasteway (RM 152.50). Some 0.22 miles of river rewet at the "top of river drying." This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	3:31	Rio Grande, 2.5 miles upstream of Peralta Wasteway (RM 155)	Top of river drying. Some 0.22 miles have rewet at the top of drying since yesterday.	0.00 (0 - 0)	Visual	3843635	340600	---	---	None
	3:00	Rio Grande, at the confluence with Peralta Wasteway (RM 152.5)	Bottom of river drying. This is the same location as yesterday.	0.00 (0 - 0)	Visual	---	---	3840192	340084	None
	3:01	Peralta Wasteway (RM 152.5)	Discharge estimate	12.50 (10 - 15)	Visual	---	---	---	---	Internet indicates 7.0 cfs.
03-Oct-2014	**General Comments:**	River is reduced to isolated pools over a 2.5-mile segment extending south from a point 2.5 miles upstream of Peralta Wasteway (RM 155.0) to a point opposite of Peralta Wasteway (RM 152.50). This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	4:20	Rio Grande, 2.5 miles upstream of Peralta Wasteway (RM 155)	Top of river drying. This is the same location as yesterday.	0.00 (0 - 0)	Visual	3843635	340600	---	---	None
	3:50	Peralta Wasteway (RM 152.5)	Discharge estimate	25.00 (20 - 30)	Visual	---	---	---	---	Internet indicated 25 cfs
	4:00	Rio Grande, at the confluence with Peralta Wasteway (RM 152.5)	Bottom of river drying. This is the same location as yesterday.	0.00 (0 - 0)	Visual	---	---	3840192	340084	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
04-Oct-2014	**General Comments:**		River is reduced to isolated pools over a 2.5-mile segment extending south from a point 2.5 miles upstream of Peralta Wasteway (RM 155.0) to a point opposite of Peralta Wasteway (RM 152.50). This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.							
	4:45	Rio Grande, 2.5 miles upstream of Peralta Wasteway (RM 155)	Top of river drying. This is the same location as yesterday.	0.00 (0 - 0)	Visual	3843635	340600	---	---	None
	4:20	Rio Grande, at the confluence with Peralta Wasteway (RM 152.5)	Bottom of river drying. . This is the same location as yesterday.	0.00 (0 - 0)	Visual	---	---	3840192	340084	None
	4:21	Peralta Wasteway (RM 152.5)	Discharge estimate	27.50 (25 - 30)	Visual	---	---	---	---	Internet indicated 28cfs.
05-Oct-2014	**General Comments:**		The river is dry or reduced to isolated pools over a 2.44 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.44-mile segment extending south from a point 2.44 miles upstream of Peralta Wasteway (RM 154.94) to a point opposite of Peralta Wasteway (RM 152.50). Some 0.06 miles rewet at the "top of drying." This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.							
	4:45	Rio Grande, 2.44 miles upstream of Peralta Wasteway (RM 154.94)	Top of river drying. Some 0.06 miles have rewet since yesterday.	0.00 (0 - 0)	Visual	3843587	340601	---	---	None
	4:14	Peralta Wasteway (RM 152.5)	Discharge estimate	22.50 (20 - 25)	Visual	---	---	---	---	Internet indicated 20cfs.
	4:15	Rio Grande, at the confluence with Peralta Wasteway (RM 152.5)	Bottom of river drying. This is the same location as yesterday.	0.00 (0 - 0)	Visual	---	---	3840192	340084	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
06-Oct-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.4 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.4-mile segment extending south from a point 2.4 miles upstream of Peralta Wasteway (RM 154.9) to a point opposite of Peralta Wasteway (RM 152.50). Some 0.04 miles rewet at the "top of drying." This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	3:33	Rio Grande, 2.4 miles upstream of Peralta Wasteway (RM 154.9)	Top of river drying. Some 0.04 miles have rewet since yesterday at the "top of drying."	0.00 (0 - 0)	Visual	3843511	340538	---	---	None
	3:00	Peralta Wasteway (RM 152.5)	Discharge estimate	11.00 (10 - 12)	Visual	---	---	---	---	None
	3:01	Rio Grande, at the confluence with Peralta Wasteway (RM 152.5)	Bottom of river drying. This is the same location as yesterday.	0.00 (0 - 0)	Visual	---	---	3840192	340084	None
07-Oct-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.45 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.45-mile segment extending south from a point 2.45 miles upstream of Peralta Wasteway (RM 154.95) to a point opposite of Peralta Wasteway (RM 152.50). Some 0.05 miles dried at the "top of drying." This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	3:00	Rio Grande, 2.45 miles upstream of Peralta Wasteway (RM 154.95)	Top of river drying. Some 0.05 miles have dried since yesterday at the "top of drying."	0.00 (0 - 0)	Visual	3843570	340598	---	---	None
	2:45	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	3:55	Rio Grande, at the confluence with Peralta Wasteway (RM 152.5)	Bottom of river drying. This is the same location as yesterday.	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
08-Oct-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.45 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.45-mile segment extending south from a point 2.45 miles upstream of Peralta Wasteway (RM 154.95) to a point opposite of Peralta Wasteway (RM 152.50). This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	3:20	Rio Grande, 2.45 miles upstream of Peralta Wasteway (RM 154.95)	Top of river drying. This is the same location as yesterday.	0.00 (0 - 0)	Visual	3843570	340598	---	---	None
	3:00	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	4:00	Rio Grande, at the confluence with Peralta Wasteway (RM 152.5)	Bottom of river drying. This is the same location as yesterday.	0.00 (0 - 0)	Visual	---	---	3840192	340084	None
	5:00	Rio Grande at Abeytas Heading (RM 134.239)	Flow estimate	17.50 (15 - 20)	Visual	---	---	---	---	None
09-Oct-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.33 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.33-mile segment extending south from a point 2.33 miles upstream of Peralta Wasteway (RM 154.83) to a point opposite of Peralta Wasteway (RM 152.50). Some 0.12 miles of river have rewet at the "top of river drying" since yesterday. This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	3:40	Rio Grande, 2.33 miles upstream of Peralta Wasteway (RM 154.83)	Top of river drying. Some 0.12 miles of river have rewet since yesterday.	0.00 (0 - 0)	Visual	3843411	340466	---	---	None
	3:02	Peralta Wasteway (RM 152.5)	Discharge estimate	6.50 (5 - 8)	Visual	---	---	---	---	None
	3:03	Rio Grande, at the confluence with Peralta Wasteway (RM 152.5)	Bottom of river drying. This is the same location as yesterday.	0.00 (0 - 0)	Visual	---	---	3840192	340084	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
10-Oct-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.25 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.25-mile segment extending south from a point 2.25 miles upstream of Peralta Wasteway (RM 154.75) to a point opposite of Peralta Wasteway (RM 152.50). Some 0.08 miles of river have rewet at the "top of river drying" since yesterday. This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	4:10	Rio Grande, 2.25 miles upstream of Peralta Wasteway (RM 154.75)	Top of river drying. Some 0.08 miles of river have rewet since yesterday.	0.00 (0 - 0)	Visual	3843411	340466	---	---	None
	3:20	Peralta Wasteway (RM 152.5)	Discharge estimate	12.50 (10 - 15)	Visual	---	---	---	---	None
	3:21	Rio Grande, at the confluence with Peralta Wasteway (RM 152.5)	Bottom of river drying. This is the same location as yesterday.	0.00 (0 - 0)	Visual	---	---	3840192	340084	None
11-Oct-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 2.31 mile segment in the Isleta Reach. River is reduced to isolated pools over a 2.31-mile segment extending south from a point 2.31 miles upstream of Peralta Wasteway (RM 154.81) to a point opposite of Peralta Wasteway (RM 152.5). Some 0.06 miles of river have dried at the "top of river drying" since yesterday. This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the Isleta Reach.								
	3:53	Rio Grande, 2.31 miles upstream of Peralta Wasteway (RM 154.81)	Top of river drying. Some 0.06 miles of river have dried since yesterday.	0.00 (0 - 0)	Visual	3843384	340442	---	---	None
	3:23	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	4:45	Rio Grande at the confluence with Peralta Wasteway (RM 152.5)	Bottom of river drying. This is the same location as yesterday.	0.00 (0 - 0)	Visual	---	---	3840192	340084	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)	Bottom (N - E)	Comments
12-Oct-2014	**General Comments:**	Upstream of Peralta Wasteway, 2.31 miles of river have rewet since yesterday. Flow in the Isleta Reach is continuous.						
	4:10	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Continuous flow. Some 2.31 miles of river have rewet upstream of Peralta Wasteway since yesterday.	NA	Visual	---	--- --- --- None	
	3:40	Peralta Wasteway (RM 152.5)	Discharge estimate	4.00 (3 - 5)	Visual	---	--- --- --- ---	Internet indicated 0.0 cfs
13-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.						
	4:15	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Continuous flow	NA	Visual	---	--- --- --- None	
	3:50	Peralta Wasteway (RM 152.5)	Discharge estimate	7.50 (5 - 10)	Visual	---	--- --- --- ---	None
14-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.						
	5:00	Rio Grande, at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	138.00 (138 - 138)	Measured	---	--- --- --- ---	USGS flow estimate
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	116.00 (116 - 116)	Measured	---	--- --- --- ---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
15-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.								
	5:00	Rio Grande, at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	105.00 (105 - 105)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	86.00 (86 - 86)	Measured	---	---	---	---	USGS flow estimate
16-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.								
	5:00	Rio Grande, at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	178.00 (178 - 178)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	86.00 (86 - 86)	Measured	---	---	---	---	USGS flow estimate
17-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.								
	5:00	Rio Grande, at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	111.00 (111 - 111)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	189.00 (189 - 189)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
18-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.									
	5:00	Rio Grande, at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	128.00 (128 - 128)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	94.00 (94 - 94)	Measured	---	---	---	---	USGS flow estimate
19-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.									
	5:00	Rio Grande, at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	111.00 (111 - 111)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	109.00 (109 - 109)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
20-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande, at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	111.00 (111 - 111)	Measured	---	---	---	---	USGS flow estimate
	4:45	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	50.00 (45 - 55)	Visual	---	---	---	---	None
	3:50	Peralta Wasteway (RM 152.5)	Flow estimate	7.50 (5 - 10)	Visual	---	---	---	---	Internet indicated 0 cfs at this time
	5:15	Peralta Wasteway (RM 152.5)	Flow estimate	12.50 (10 - 15)	Visual	---	---	---	---	Internet indicated 0 cfs at this time
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	160.00 (160 - 160)	Measured	---	---	---	---	USGS flow estimate
21-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.									
	5:00	Rio Grande, at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	231.00 (231 - 231)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	101.00 (101 - 101)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
22-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.									
	5:00	Rio Grande at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	108.00 (108 - 108)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	119.00 (119 - 119)	Measured	---	---	---	---	USGS flow estimate
23-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.									
	5:00	Rio Grande at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	88.00 (88 - 88)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	84.00 (84 - 84)	Measured	---	---	---	---	USGS flow estimate
24-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.									
	5:00	Rio Grande at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	99.00 (99 - 99)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	69.00 (69 - 69)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
25-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings.									
	5:00	Rio Grande at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	105.00 (105 - 105)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	78.00 (78 - 78)	Measured	---	---	---	---	USGS flow estimate
26-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	83.00 (83 - 83)	Measured	---	---	---	---	USGS estimate
	5:05	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	45.00 (40 - 50)	Visual	---	---	---	---	None
	4:55	Peralta Wasteway (RM 152.5)	Flow estimate	1.00 (1 - 1)	Visual	---	---	---	---	None
	5:25	Peralta Wasteway (RM 152.5)	Flow estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	5:00	Rio Grande at Hwy 346 (RM 140.82)	Flow estimate	69.00 (69 - 69)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
27-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	94.00 (94 - 94)	Measured	---	---	---	---	USGS flow estimate
	5:15	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	30.00 (25 - 35)	Visual	---	---	---	---	None
	5:00	Peralta Wasteway (RM 152.5)	Discharge estimate	6.00 (5 - 7)	Visual	---	---	---	---	None
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	53.00 (53 - 53)	Measured	---	---	---	---	USGS flow estimate
28-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	260.00 (260 - 260)	Measured	---	---	---	---	USGS flow estimate
	12:14	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	87.70 (87.7 - 87.7)	Measured	---	---	---	---	None
	11:05	Peralta Wasteway (RM 152.5)	Discharge estimate	5.00 (5 - 5)	Visual	---	---	---	---	Internet indicated 2.0 cfs at this time
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	53.00 (53 - 53)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
29-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	102.00 (102 - 102)	Measured	---	---	---	---	USGS flow estimate
	13:02	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	40.00 (35 - 45)	Visual	---	---	---	---	None
	12:08	Peralta Wasteway (RM 152.5)	Discharge estimate	12.50 (10 - 15)	Visual	---	---	---	---	None
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	82.00 (82 - 82)	Visual	---	---	---	---	USGS flow estimate
30-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	142.00 (142 - 142)	Measured	---	---	---	---	USGS flow estimate
	8:00	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	45.00 (40 - 50)	Visual	---	---	---	---	None
	7:55	Peralta Wasteway (RM 152.5)	Discharge estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	82.00 (82 - 82)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

Isleta Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
31-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at the USGS Bosque Farms Gauge (RM 166.09)	Flow estimate	231.00 (231 - 231)	Measured	---	---	---	---	USGS flow estimate
	5:45	Rio Grande, 0.14 miles upstream of the confluence with Peralta Wasteway (RM 152.64)	Flow estimate	105.00 (100 - 110)	Visual	---	---	---	---	None
	5:30	Peralta Wasteway (RM 152.5)	Flow estimate	6.00 (5 - 7)	Visual	---	---	---	---	None
	5:00	Rio Grande, at Hwy 346 (RM 140.82)	Flow estimate	98.00 (98 - 98)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
01-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. No field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	214.00 (214 - 214)	Measured	---	---	---	---	None
02-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. No field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	181.00 (181 - 181)	Measured	---	---	---	---	None
03-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	160.00 (160 - 160)	Measured	---	---	---	---	None
	17:00	Rio Grande just upstream of North Boundary Bosque del Apache Refuge (RM 84.33)	Flow estimate	65.00 (65 - 65)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
04-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	188.00 (188 - 188)	Measured	---	---	---	---	None
	17:00	Rio Grande at Mid Bosque del Apache Refuge (RM 78.77)	Flow estimate	37.59 (37.59 - 37.59)	Measured	---	---	---	---	None
05-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	190.00 (190 - 190)	Measured	---	---	---	---	None
	8:45	Rio Grande at Mid Bosque del Apache Refuge (RM 78.77)	Flow estimate	54.72 (54.72 - 54.72)	Measured	---	---	---	---	None
	11:15	Rio Grande 500 yards upstream of South Boundary Bosque del Apache Refuge (RM 74.11)	Flow estimate	40.79 (40.79 - 40.79)	Measured	---	---	---	---	None
06-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	193.00 (193 - 193)	Measured	---	---	---	---	None
	9:15	Rio Grande at Mid Bosque del Apache Refuge (RM 78.77)	Flow estimate	49.03 (49.03 - 49.03)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
07-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	203.00 (203 - 203)	Measured	---	---	---	---	None
	14:58	Rio Grande at Mid Bosque del Apache Refuge (RM 78.77)	Flow estimate	55.20 (55.2 - 55.2)	Measured	---	---	---	---	None
08-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	169.00 (169 - 169)	Measured	---	---	---	---	None
09-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	161.00 (161 - 161)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
10-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	156.00 (156 - 156)	Measured	---	---	---	---	None
	8:00	Rio Grande at Mid Bosque del Apache Refuge (RM 77)	Flow estimate	30.00 (30 - 30)	Visual	---	---	---	---	None
	7:15	Rio Grande 1.0 mile upstream of South Boundary Bosque del Apache Refuge (RM 74.7)	Flow estimate	17.50 (15 - 20)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
11-Apr-2014		**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	160.00 (160 - 160)	Measured	---	---	---	---	None
	3:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	75.00 (75 - 75)	Visual	---	---	---	---	None
	6:15	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	80.00 (80 - 80)	Visual	---	---	---	---	None
	11:15	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	85.00 (85 - 85)	Visual	---	---	---	---	None
	6:40	Rio Grande upstream of North Boundary Bosque del Apache Refuge (RM 84.33)	Flow estimate	20.00 (20 - 20)	Visual	---	---	---	---	None
	11:28	Rio Grande upstream of North Boundary Bosque del Apache Refuge (RM 84.33)	Flow estimate	40.00 (40 - 40)	Visual	---	---	---	---	None
	12:20	Rio Grande at Mid Bosque del Apache Refuge (RM 77)	Continuous flow	NA	Visual	---	---	---	---	None
	13:10	Rio Grande at River Widening, Bosque del Apache Refuge (RM 76.57)	Continuous flow	35.00 (35 - 35)	Visual	---	---	---	---	None
	3:40	Rio Grande 1.0 mile upstream of South Boundary Bosque del Apache Refuge (RM 74.7)	Flow estimate	15.00 (15 - 15)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
12-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	178.00 (178 - 178)	Measured	---	---	---	---	None
	4:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	70.00 (70 - 70)	Visual	---	---	---	---	None
	5:00	Rio Grande at River Widening, Bosque del Apache Refuge (RM 77)	Continuous flow	NA	Visual	---	---	---	None	
13-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	178.00 (178 - 178)	Measured	---	---	---	---	None
14-Apr-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. No field observations.									
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	160.00 (160 - 160)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
15-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	158.00 (158 - 158)	Measured	---	---	---	---	None
	4:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	62.50 (60 - 65)	Visual	---	---	---	---	None
	7:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	60.00 (60 - 60)	Visual	---	---	---	---	None
	5:00	Rio Grande at River Widening, Bosque del Apache Refuge (RM 77)	Flow estimate	30.00 (30 - 30)	Visual	---	---	---	---	None
16-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	169.00 (169 - 169)	Measured	---	---	---	---	None
17-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	191.00 (191 - 191)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
18-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	190.00 (190 - 190)	Measured	---	---	---	---	None
19-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	178.00 (178 - 178)	Measured	---	---	---	---	None
	9:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	72.50 (70 - 75)	Visual	---	---	---	---	None
20-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	200.00 (200 - 200)	Measured	---	---	---	---	None
21-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	203.00 (203 - 203)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
22-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	198.00 (198 - 198)	Measured	---	---	---	---	None
23-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	232.00 (232 - 232)	Measured	---	---	---	---	None
24-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San USGS Gauge (RM 115.94)	Flow estimate	253.00 (253 - 253)	Measured	---	---	---	---	None
25-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	226.00 (226 - 226)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
26-Apr-2014		**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	217.00 (217 - 217)	Measured	---	---	---	---	None
	8:00	Rio Grande at Brown Arroyo (RM 94)	Continuous flow	NA Visual	---	---	---	---	None	
	6:30	Rio Grande at US Hwy 380 (RM 87.1)	Flow estimate	100.00 (100 - 100)	Visual	---	---	---	---	None
	10:00	Rio Grande at US Hwy 380 (RM 87.1)	Flow estimate	120.00 (120 - 120)	Visual	---	---	---	---	None
	7:10	Rio Grande 0.10 miles upstream of North Boundary Bosque del Apache Refuge pump site (RM 84.33)	Continuous flow	NA Visual	---	---	---	---	None	
	7:25	North Boundary Bosque del Apache Refuge pump site (RM 84.3)	Discharge estimate; 0bserved 3 pumps running	30.00 (30 - 30)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
27-Apr-2014		**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.							
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	214.00 (214 - 214)	Measured	---	---	---	---	None
	6:20	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	100.00 (100 - 100)	Visual	---	---	---	---	None
	20:00	Rio Grande at US Hwy 380 (RM 87.1)	Flow estimate	100.00 (100 - 100)	Visual	---	---	---	---	None
	7:00	Rio Grande 0.10 miles upstream of North Boundary Bosque del Apache Refuge pump site (RM 84.33)	Flow estimate	75.00 (75 - 75)	Visual	---	---	---	---	None
	7:20	North Boundary Bosque del Apache Refuge pump site (RM 84.23)	Three pumps running	NA	Visual	---	---	---	---	None
28-Apr-2014		**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.							
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	232.00 (232 - 232)	Visual	---	---	---	---	None
29-Apr-2014		**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.							
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	328.00 (328 - 328)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
30-Apr-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	357.00 (357 - 357)	Measured	---	---	---	---	None
01-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	235.00 (235 - 235)	Measured	---	---	---	---	None
02-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the Isleta Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the Bosque Farms USGS Gauge (RM 166.08)	Flow estimate	200.00 (200 - 200)	Measured	---	---	---	---	None
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	278.00 (278 - 278)	Measured	---	---	---	---	None
03-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	253.00 (253 - 253)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
04-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	235.00 (235 - 235)	Measured	---	---	---	---	None
05-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	210.00 (210 - 210)	Measured	---	---	---	---	None
06-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	183.00 (183 - 183)	Measured	---	---	---	---	None
07-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	174.00 (174 - 174)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
08-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	160.00 (160 - 160)	Measured	---	---	---	---	None
09-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	184.00 (184 - 184)	Measured	---	---	---	---	None
10-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	627.00 (627 - 627)	Measured	---	---	---	---	None
11-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	819.00 (819 - 819)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
12-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	950.00 (950 - 950)	Measured	---	---	---	---	None
13-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	1110.00 (1110 - 1110)	Measured	---	---	---	---	None
14-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	1090.00 (1090 - 1090)	Measured	---	---	---	---	None
15-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	1170.00 (1170 - 1170)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
16-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	980.00 (980 - 980)	Measured	---	---	---	---	None
17-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	980.00 (980 - 980)	Measured	---	---	---	---	None
18-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	950.00 (950 - 950)	Measured	---	---	---	---	None
19-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	787.00 (787 - 787)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
20-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	709.00 (709 - 709)	Measured	---	---	---	---	None
21-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	558.00 (558 - 558)	Measured	---	---	---	---	None
22-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	404.00 (404 - 404)	Measured	---	---	---	---	None
23-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	303.00 (303 - 303)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
24-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	305.00 (305 - 305)	Measured	---	---	---	---	None
25-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	285.00 (285 - 285)	Measured	---	---	---	---	None
26-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	409.00 (409 - 409)	Measured	---	---	---	---	None
27-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	583.00 (583 - 583)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
28-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	605.00 (605 - 605)	Measured	---	---	---	---	None
29-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	586.00 (586 - 586)	Measured	---	---	---	---	None
30-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	522.00 (522 - 522)	Measured	---	---	---	---	None
31-May-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	549.00 (549 - 549)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
01-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	513.00 (513 - 513)	Measured	---	---	---	---	None
02-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	368.00 (368 - 368)	Measured	---	---	---	---	None
03-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	316.00 (316 - 316)	Measured	---	---	---	---	None
04-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	268.00 (268 - 268)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
05-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	253.00 (253 - 253)	Measured	---	---	---	---	None
06-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	505.00 (505 - 505)	Measured	---	---	---	---	None
07-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	682.00 (682 - 682)	Measured	---	---	---	---	None
08-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	493.00 (493 - 493)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
09-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	420.00 (420 - 420)	Measured	---	---	---	---	None
10-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	365.00 (365 - 365)	Measured	---	---	---	---	None
11-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	291.00 (291 - 291)	Measured	---	---	---	---	None
12-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	299.00 (299 - 299)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
13-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	235.00 (235 - 235)	Measured	---	---	---	---	None
14-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	212.00 (212 - 212)	Measured	---	---	---	---	None
15-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	210.00 (210 - 210)	Measured	---	---	---	---	None
16-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	203.00 (203 - 203)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
17-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	184.00 (184 - 184)	Measured	---	---	---	---	None
18-Jun-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	178.00 (178 - 178)	Measured	---	---	---	---	None
	5:00	Rio Grande at Brown Arroyo (RM 94)	Flow estimate	87.50 (85 - 90)	Visual	---	---	---	---	None
	4:30	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	50.00 (50 - 50)	Visual	---	---	---	---	None
	5:30	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	50.00 (50 - 50)	Visual	---	---	---	---	None
	4:00	Rio Grande 0.10 miles upstream of North Boundary Bosque del Apache Refuge pump site (RM 84.33)	Flow estimate	30.00 (30 - 30)	Visual	---	---	---	---	Three pumps running
	7:20	Rio Grande at River Widening (Bosque del Apache) (RM 77)	Flow estimate	20.00 (20 - 20)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
19-Jun-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 0.9 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 0.9-mile segment extending south from a point 1.0 mi. upstream of South Boundary Bosque del Apache Refuge pump site (RM 74.7) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). This river segment represents new drying. Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	168.00 (168 - 168)	Measured	---	---	---	---	None
	6:30	Rio Grande 0.1 miles upstream of North Boundary Bosque del Apache Refuge pump site (RM 84.33)	Flow estimate	27.50 (25 - 30)	Visual	---	---	---	---	Three pumps running
	14:33	Rio Grande 0.1 miles upstream of North Boundary Bosque del Apache Refuge pump site (RM 84.33)	Flow estimate	20.00 (20 - 20)	Visual	---	---	---	---	Three pumps running
	8:30	Rio Grande 1.0 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 74.7)	Continuous flow	NA Visual	---	---	---	---	Observation by	Thomas Archdeacon (USFWS)
	15:00	Rio Grande 1.0 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 74.7)	Top of river drying	0.00 (0 - 0)	Visual	3734513	323490	---	---	Observation by Thomas Archdeacon (USFWS)
	15:00	Rio Grande 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
	8:30	Rio Grande at South Boundary Bosque del Apache Refuge pump site (RM 73.7)	Continuous flow	0.99 (0.99 - 0.99)	Visual	---	---	---	---	Observation by Thomas Archdeacon (USFWS)
	7:51	Rio Grande at San Marcial (RM 68.51)	Flow estimate	30.00 (30 - 30)	Visual	---	---	---	---	None
	7:15	Rio Grande at Ft. Craig (RM 64.8)	Flow estimate	30.00 (30 - 30)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
20-Jun-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 1.77 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 1.77-mile segment extending south from a point 1.0 mile downstream of River Widening (RM 75.57) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this de-watered segment, 0.77 miles represents "new drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	169.00 (169 - 169)	Measured	---	---	---	---	None
	6:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	40.00 (40 - 40)	Visual	---	---	---	---	None
	6:30	Rio Grande, 0.1 miles upstream of North Boundary Bosque del Apache Refuge pump site (RM 84.33)	Flow estimate	27.50 (25 - 30)	Visual	---	---	---	---	None
	7:00	Rio Grande at Mid Bosque del Apache Refuge (RM 78.77)	Flow estimate	17.50 (15 - 20)	Visual	---	---	---	---	None
	7:16	Rio Grande at River Widening (Bosque del Apache Refuge) (RM 76.57)	Flow estimate	15.00 (15 - 15)	Visual	---	---	---	---	None
	15:00	Rio Grande, 1.0 mile downstream of River Widening (RM 75.57)	Top of river drying	0.00 (0 - 0)	Visual	3735689	324467	---	---	Observation of Thomas Archdeacon (USFWS)
	15:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
21-Jun-2014		**General Comments:**	The river is dry or reduced to isolated pools over a 6.67 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 6.67 mile segment extending south from a point 3.66 mile downstream of North Boundary Bosque del Apache Refuge (RM 80.47) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this de-watered segment, 4.9 miles represents "new drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.							
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	165.00 (165 - 165)	Measured	---	---	---	---	None
	6:30	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	32.50 (30 - 35)	Visual	---	---	---	---	None
	6:45	Rio Grande, 0.10 miles upstream of North Boundary Bosque del Apache Refuge pump site (RM 84.33)	Flow estimate	17.50 (15 - 20)	Visual	---	---	---	---	None
	20:08	North Boundary Bosque del Apache Refuge pump site (RM 84.23)	Pump discharge	27.00 (27 - 27)	Visual	---	---	---	---	None
	12:33	Rio Grande, 3.66 miles downstream of North Boundary Bosque del Apache Refuge (RM 80.47)	Top of river drying	0.00 (0 - 0)	Visual	3743173	328290	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
22-Jun-2014		**General Comments:**	The river is dry or reduced to isolated pools over a 6.67 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 6.67 mile segment extending south from a point 3.66 mile downstream of North Boundary Bosque del Apache Refuge (RM 80.47) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). There is no "new drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.							
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	169.00 (169 - 169)	Measured	---	---	---	---	None
	7:20	Rio Grande 0.10 miles upstream of North Boundary Bosque del Apache Refuge pump site (RM 84.33)	Flow estimate	17.50 (15 - 20)	Visual	---	---	---	---	None
	7:20	North Boundary Bosque del Apache Refuge pump site (RM 84.23)	Pump discharge estimate	21.00 (21 - 21)	Visual	---	---	---	---	None
	8:15	Rio Grande, 3.66 miles downstream of North Boundary Bosque del Apache Refuge (RM 80.47)	Top of river drying	0.00 (0 - 0)	Visual	3743173	328290	---	---	Top of river drying is unchanged from yesterday.
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
23-Jun-2014	**General Comments:**	The river is dry or reduced to isolated pools over an 8.65 mile segment in the San Acacia Reach. River is reduced to isolated pools over an 8.65 mile segment extending south from a point 1.66 mile downstream of North Boundary Bosque del Apache Refuge (RM 82.45) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 1.98 miles represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	158.00 (158 - 158)	Visual	---	---	---	---	None
	6:30	Rio Grande 0.10 miles upstream of North Boundary Bosque del Apache Refuge pump site (RM 84.33)	Flow estimate	17.50 (15 - 20)	Visual	---	---	---	---	North Boundary pumps were turned off at 06:00 hrs
	8:00	Rio Grande, 1.66 miles downstream of North Boundary Bosque del Apache Refuge (RM 82.45)	Top of river drying	0.00 (0 - 0)	Visual	3746248	329282	---	---	Of this river drying, 1.98 miles represents "new drying."
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
	20:30	Rio Grande at San Marcial (RM 68.51)	Flow estimate	25.00 (25 - 25)	Visual	---	---	---	---	None
	20:50	Rio Grande at Ft. Craig (RM 64.8)	Flow estimate	15.00 (15 - 15)	Visual	---	---	---	---	None
	23:00	Rio Grande at White Gate (RM 59.22)	Flow estimate	15.00 (15 - 15)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
24-Jun-2014		**General Comments:**	The river is dry or reduced to isolated pools over a 9.97 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 9.97 mile segment extending south from a point 0.36 mile downstream of North Boundary Bosque del Apache Refuge (RM 83.77) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 1.32 miles represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.							
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	143.00 (143 - 143)	Measured	---	---	---	---	None
	6:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	27.50 (25 - 30)	Visual	---	---	---	---	None
	23:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	7.50 (5 - 10)	Visual	---	---	---	---	None
	6:45	Rio Grande, 0.36 miles downstream of North Boundary Bosque del Apache Refuge (RM 83.77)	Top of river drying	0.00 (0 - 0)	Visual	3748733	329061	---	---	Of this river drying, 1.32 miles represents "new drying."
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
25-Jun-2014		**General Comments:**	The river is dry or reduced to isolated pools over a 12.2 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 12.2 mile segment extending south from a point 2.14 mile upstream of North Boundary Bosque del Apache Refuge (RM 86.0) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 2.23 miles represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.							
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	131.00 (131 - 131)	Visual	---	---	---	---	None
	6:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	7.50 (5 - 10)	Visual	---	---	---	---	None
	7:00	Rio Grande, 2.14 miles upstream of North Boundary Bosque del Apache Refuge (RM 86)	Top of river drying	0.00 (0 - 0)	Visual	3752712	329025	---	---	Of this river drying, 2.23 miles represents "new drying."
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
26-Jun-2014		**General Comments:**	The river is dry or reduced to isolated pools over a 13.1 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 13.1 mile segment extending south from a point 0.22 miles downstream of Hwy 380 (RM 86.9) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 0.9 miles represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.							
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	118.00 (118 - 118)	Measured	---	---	---	---	None
	6:00	Rio Grande, 0.22 miles downstream of Hwy 380 (RM 86.9)	Top of river drying	0.00 (0 - 0)	Visual	3754380	328806	---	---	Of this river drying, 0.9 miles represents "new drying."
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
27-Jun-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 14.62 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 14.62 mile segment extending south from a point 1.32 miles upstream of Hwy 380 (RM 88.42) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 1.52 miles represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	114.00 (114 - 114)	Measured	---	---	---	---	None
	5:30	Rio Grande at Brown Arroyo (RM 94)	Flow estimate	25.00 (25 - 25)	Visual	---	---	---	---	None
	6:30	Rio Grande at Neil Cupp (RM 90.03)	Flow estimate	20.00 (20 - 20)	Visual	---	---	---	---	None
	7:00	Rio Grande, 1.32 miles upstream of Hwy 380 (RM 88.42)	Top of river drying	0.00 (0 - 0)	Visual	3756804	328960	---	---	Of this river drying, 1.52 miles represents "new drying."
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
28-Jun-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 16.23 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 16.23 mile segment extending south from Neil Cupp pump site (RM 90.03) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 1.61 miles represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	105.00 (105 - 105)	Measured	---	---	---	---	None
	12:19	Rio Grande at Neil Cupp (RM 90.03)	Top of river drying	0.00 (0 - 0)	Visual	3758004	329188	---	---	Of this river drying, 1.61 miles represents "new drying."
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
29-Jun-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 16.58 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 16.58 mile segment extending south from a point 0.36 miles upstream of Neil Cupp Pump Site (RM 90.38) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 0.35 miles represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	94.00 (94 - 94)	Measured	---	---	---	---	None
	6:00	Rio Grande 0.36 miles upstream of Neil Cupp (RM 90.38)	Top of river drying	0.00 (0 - 0)	Visual	3759310	328705	---	---	Of this river drying, 0.35 miles represents "new drying."
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
30-Jun-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 17.44 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 17.44 mile segment extending south from a point 1.21 miles upstream of Neil Cupp Pump Site (RM 91.24) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 0.86 miles represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	83.00 (83 - 83)	Measured	---	---	---	---	None
	6:00	Rio Grande 1.21 miles upstream of Neil Cupp (RM 91.24)	Top of river drying	0.00 (0 - 0)	Visual	3760400	328276	---	---	Of this river drying, 0.86 miles represents "new drying."
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
01-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over an 18.8 mile segment in the San Acacia Reach. River is reduced to isolated pools over an 18.8 mile segment extending south from a point 2.57 miles upstream of Neil Cupp (RM 92.6) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 1.36 mile represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	8:30	Rio Grande 2.57 miles upstream of Neil Cupp (RM 92.6)	Presumed top of river drying	0.00 (0 - 0)	Visual	3761345	328608	---	---	Of this river drying, 1.36 mile represents "new drying."
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
02-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 19.8 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 19.8 mile segment extending south from a point 0.4 miles downstream of Brown Arroyo (RM 93.6) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 1.0 miles represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	8:30	Rio Grande 0.4 miles downstream of Brown Arroyo (RM 93.6)	Top of river drying	0.00 (0 - 0)	Visual	3763412	327509	---	---	Of this river drying, 1.0 miles represents "new drying."
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
03-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 20.4 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 20.4 mile segment extending south from a point 0.2 miles upstream of Brown Arroyo (RM 94.2) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 0.6 miles represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	8:30	Rio Grande 0.2 miles upstream of Brown Arroyo (RM 94.2)	Top of river drying	0.00 (0 - 0)	Visual	3764320	327208	---	---	Of this river drying, 0.6 miles represents "new drying"
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
04-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 20.75 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 20.75 mile segment extending south from a point 0.55 miles upstream of Brown Arroyo (RM 94.55) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 0.36 miles represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	0:00	Rio Grande 0.55 miles upstream of Brown Arroyo (RM 94.55)	Presumed top of river drying	0.00 (0 - 0)	Visual	3764803	327480	---	---	Of this river drying, 0.36 miles represents "new drying." Source of information – Tristan Austring (USFWS).
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
05-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 21.63 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 21.63 mile segment extending south from a point 01.43 miles upstream of Brown Arroyo (RM 95.43) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Of this river drying, 0.88 miles represents "new drying" at the "top of drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	0:00	Rio Grande 1.43 miles upstream of Brown Arroyo (RM 95.43)	Presumed top of river drying	0.00 (0 - 0)	Visual	3765851	328055	---	---	Of this river drying, 0.88 miles represents "new drying." Source of information – Tristan Austring (USFWS).
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
06-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 20.2 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 20.2 mile segment extending south from Brown Arroyo (RM 94.0) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Some 1.43 miles of river are presumed to have rewet at the top of drying since yesterday. Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	0:00	Rio Grande at Brown Arroyo (RM 94)	Presumed top of river drying	0.00 (0 - 0)	Visual	3764000	327236	---	---	Some 1.43 miles of river are presumed to have rewet at the top of drying. Tristan Austring (USFWS) attests that he "thinks" the river rewet this date partly based on the increasing hydrograph for San Acacia on this date
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
07-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over an 18.2 mile segment in the San Acacia Reach. River is reduced to isolated pools over an 18.2 mile segment extending south from a point 2.0 miles downstream of Brown Arroyo (RM 92.0) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Some 2.0 miles of river are presumed to have rewet at the top of drying since yesterday. There is no "new drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	9:46	Rio Grande at Brown Arroyo (RM 94)	Flow estimate. River has recently rewet at this site as is evident from the foamy discharge that typically accompanies the leading edge of an advancing flow pulse.	50.00 (50 - 50)	Visual	---	---	---	---	None
	9:46	Rio Grande 2.0 miles downstream of Brown Arroyo (RM 92)	Presumed top of river drying	0.00 (0 - 0)	Visual	3761419	328196	---	---	This is an approximation based on flow observed at Brown Arroyo and absence of flow at Neil Cupp. If this presumption is true, some 2.0 miles of river have rewet at the top of drying since yesterday.
	9:46	Rio Grande at Neil Cupp pump site (RM 90.03)	Flow estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	9:46	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	0.00 (0 - 0)	Visual	---	---	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
08-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 16.2 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 16.2 mile segment extending south from a point 4.0 miles downstream of Brown Arroyo (RM 90.0) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Some 2.0 miles of river are presumed to have rewet at the top of drying since yesterday. There is no "new drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	0:00	Rio Grande 4.0 miles downstream of Brown Arroyo (RM 90)	Presumed top of river drying. This is an approximation that represents an interpolation between observations of top of drying made on 07-July-2014 and 09-July-2014. If this presumption is true, some 2.0 miles of river have rewet at the top of drying since yesterday	0.00 (0 - 0)	Visual	3758821	329020	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
09-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 13.71 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 13.71 mile segment extending south from the USGS Hwy 380 Gauge site (RM 87.51) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). There is 2.49 miles of river rewetting at the "top of drying" since yesterday. There is no "new drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	8:30	Rio Grande at USGS Hwy 380 Gauge site (RM 87.51)	Rewetting flow pulse just arrived. This event documents "top of drying."	0.00 (0 - 0)	Visual	3755376	328884	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
10-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 12.8 mile segment in the San Acacia Reach. At 1358 hrs, the river is reduced to isolated pools over a 12.8 mile segment extending south from a point 0.5 miles downstream of Hwy 380 (RM 86.6) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). There has been 0.9 miles of river rewetting at the "top of drying" since yesterday. There has been no "new drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	11:15	Rio Grande at Hwy 380 (RM 87.1)	Top of river drying	0.00 (0 - 0)	Visual	3754725	328895	---	---	None
	13:58	Rio Grande 0.5 miles downstream of Hwy 380 (RM 86.6)	Top of river drying. There is 0.9 miles of river rewetting at the "top of drying" since yesterday.	0.00 (0 - 0)	Visual	3753953	328646	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
11-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 15.7 mile segment in the San Acacia Reach. At 1358 hrs, the river is reduced to isolated pools over a 15.7 mile segment extending south from a point 0.5 miles downstream of Neil Cupp (RM 89.5) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). There has been 2.9 miles of river drying at the "top of drying" since yesterday; this segment had dried previously this year. There has been no "new drying." Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	7:00	Rio Grande at Brown Arroyo (RM 94)	Flow estimate	22.50 (20 - 25)	Visual	---	---	---	---	None
	7:30	Rio Grande at Neil Cupp (RM 90.03)	Flow estimate	5.00 (5 - 5)	Visual	---	---	---	---	None
	8:30	Rio Grande 0.5 miles downstream of Neil Cupp (RM 89.5)	Top of river drying. There has been 2.9 miles of river drying at the "top of drying" since yesterday.	0.00 (0 - 0)	Visual	3758046	329193	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
12-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach. Based on the time of arrival of a large flow pulse at the USGS Gauge upstream of Hwy 380, and making an allowance of approximately sixteen hour travel time from that point to the South Boundary Bosque del Apache Refuge pump site, flow is believed to have become continuous in the San Acacia Reach at about 16:00 hrs. Some 15.7 miles of river rewet since yesterday.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	138.00 (138 - 138)	Visual	---	---	---	---	None
13-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach. No field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	188.00 (188 - 188)	Measured	---	---	---	---	None
14-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach. No field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	324.00 (324 - 324)	Measured	---	---	---	---	None
15-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach based on USGS measures and field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	253.00 (253 - 253)	Measured	---	---	---	---	None
	8:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	300.00 (300 - 300)	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
16-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach based on USGS flow measures.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	276.00 (276 - 276)	Measured	---	---	---	---	None
17-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach based on USGS flow measures.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	787.00 (787 - 787)	Measured	---	---	---	---	None
18-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach based on USGS flow measures.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	736.00 (736 - 736)	Measured	---	---	---	---	None
19-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach based on USGS flow measures.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	1800.00 (1800 - 1800)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
20-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach based on USGS flow measures.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	2970.00 (2970 - 2970)	Measured	---	---	---	---	None
21-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach based on USGS flow measures.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	470.00 (470 - 470)	Measured	---	---	---	---	None
22-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach based on USGS flow measures.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	659.00 (659 - 659)	Measured	---	---	---	---	None
23-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach based on USGS flow measures.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	268.00 (268 - 268)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
24-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach based on USGS flow measures.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	196.00 (196 - 196)	Measured	---	---	---	---	None
25-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous in the San Acacia Reach based on USGS flow measures and field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	191.00 (191 - 191)	Measured	---	---	---	---	None
	7:00	Rio Grande 0.10 miles upstream of North Boundary Bosque del Apache Refuge pump site (RM 84.33)	Flow estimate	100.00 (100 - 100)	Visual	---	---	---	---	None
26-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 3.02 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 3.02 mile segment extending south from a point 0.25 miles upstream of River Widening Bosque del Apache Refuge (RM 76.82) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). This segment of river had dried previously this year. Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	165.00 (165 - 165)	Measured	---	---	---	---	None
	7:20	Rio Grande 0.25 miles upstream of River Widening Bosque del Apache Refuge (RM 76.82)	Top of river drying	0.00 (0 - 0)	Visual	3737389	326014	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
27-Jul-2014		**General Comments:**	The river is dry or reduced to isolated pools over a 5.9 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 5.9 mile segment extending south from a point 0.7 miles upstream of a point opposite of Bosque del Apache Refuge Headquarters (RM 79.7) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). This segment of river has dried previously this year. Elsewhere, flow in the main river channel is continuous in the San Acacia Reach.							
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	72.00 (72 - 72)	Measured	---	---	---	---	None
	8:00	Rio Grande at Socorro (RM 99.03)	Flow estimate	100.00 (100 - 100)	Visual	---	---	---	---	None
	7:00	Rio Grande at Brown Arroyo (RM 94)	Flow estimate	30.00 (30 - 30)	Visual	---	---	---	---	None
	6:30	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	40.00 (40 - 40)	Visual	---	---	---	---	None
	13:20	Rio Grande, 0.7 miles upstream of a point opposite of Bosque del Apache Refuge Headquarters (RM 79.7)	Top of river drying	0.00 (0 - 0)	Visual	3741614	327850	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South del Boundary Bosque Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
28-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over an 11.49 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 4.38-mile segment upstream of Bosque del Apache Refuge. This river segment extends north from the North boundary Bosque del Apache pump site (RM 84.3) to a point 1.5 miles upstream of Hwy 380 (RM 88.68). This segment of river dried previously this year. A second segment of river is reduced to isolated pools on the Bosque del Apache Refuge. Top of drying in this segment is 2.3 miles upstream of a point opposite of Bosque del Apache Refuge Headquarters (RM 80.91). Bottom of river drying is 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). The length of this intermittent river segment is 7.11 miles, all of which dried previously this year. Total river dry in the San Acacia Reach, including the two dry segments, is 11.49 miles. Aside from these two segments, the flow in the main river channel is continuous in the San Acacia Reach.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	69.00 (69 - 69)	Measured	---	---	---	---	None
	6:30	Rio Grande, 1.5 miles upstream of Hwy 380 (RM 88.68)	Top of river drying	0.00 (0 - 0)	Visual	3757116	328939	---	---	None
	6:00	Rio Grande at North Boundary Bosque del Apache pump site (RM 84.3)	Bottom of river drying	0.00 (0 - 0)	Visual	---	---	3749566	328971	None
	7:40	Rio Grande, 2.3 miles upstream of a point opposite of Bosque del Apache Refuge Headquarters (RM 80.91)	Top of river drying	0.00 (0 - 0)	Visual	3743660	328771	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South del Boundary Bosque Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
29-Jul-2014		**General Comments:**	The river is dry or reduced to isolated pools over an 11.52 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 4.41-mile segment upstream of Bosque del Apache Refuge. This river segment extends north from the North boundary Bosque del Apache pump site (RM 84.3) to a point 1.53 miles upstream of Hwy 380 (RM 88.71). This segment of river dried previously this year. A second segment of river is reduced to isolated pools on the Bosque del Apache Refuge. Top of drying in this segment is 2.3 miles upstream of a point opposite of Bosque del Apache Refuge Headquarters (RM 80.91). Bottom of river drying is 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). The length of this intermittent river segment is 7.11 miles, all of which dried previously this year. Total river dry in the San Acacia Reach, including the two dry segments, is 11.52 miles. Aside from these two segments, the flow in the main river channel is continuous in the San Acacia Reach.							
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	57.00 (57 - 57)	Measured	---	---	---	---	None
	7:00	Rio Grande, 1.53 miles upstream of Hwy 380 (RM 88.71)	Top of river drying	0.00 (0 - 0)	Visual	3757159	328938	---	---	None
	5:15	Rio Grande at North Boundary Bosque del Apache pump site (RM 84.3)	Bottom of river drying	0.00 (0 - 0)	Visual	---	---	3749566	328971	None
	5:30	Rio Grande, 2.3 miles upstream of a point opposite of Bosque del Apache Refuge Headquarters (RM 80.91)	Top of river drying	0.00 (0 - 0)	Visual	3743660	328771	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
30-Jul-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 16.53 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 16.53-mile segment extending south from a point 0.3 miles upstream of Neil Cupp (RM 90.33) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Some 5.01 miles of river have dried since yesterday; this river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	35.00 (35 - 35)	Measured	---	---	---	---	None
	7:00	Rio Grande, 0.3 miles upstream of Neil Cupp (RM 90.33)	Top of river drying	0.00 (0 - 0)	Visual	3759201	328771	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
31-Jul-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations. Some 16.53 miles of river in the San Acacia Reach have rewet since yesterday.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	flow estimate	383.00 (383 - 383)	Measured	---	---	---	---	None
01-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	280.00 (280 - 280)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
02-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	352.00 (352 - 352)	Measured	---	---	---	---	None
	8:34	Rio Grande at Brown Arroyo (RM 94)	Flow estimate	200.00 (200 - 200)	Visual	---	---	---	---	None
03-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at Escondida USGS Gauge (RM 104.1)	Flow estimate	453.00 (453 - 453)	Measured	---	---	---	---	None
04-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at Escondida USGS Gauge (RM 104.1)	Flow estimate	1650.00 (1650 - 1650)	Measured	---	---	---	---	None
05-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	2730.00 (2730 - 2730)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
06-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	1070.00 (1070 - 1070)	Measured	---	---	---	---	None
07-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	15:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	656.00 (656 - 656)	Measured	---	---	---	---	None
08-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	586.00 (586 - 586)	Measured	---	---	---	---	None
09-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	583.00 (583 - 583)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
10-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	519.00 (519 - 519)	Measured	---	---	---	---	None
11-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	407.00 (407 - 407)	Measured	---	---	---	---	None
12-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	428.00 (428 - 428)	Measured	---	---	---	---	None
13-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	753.00 (753 - 753)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
14-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	643.00 (643 - 643)	Measured	---	---	---	---	None
15-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	476.00 (476 - 476)	Measured	---	---	---	---	None
16-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	809.00 (809 - 809)	Measured	---	---	---	---	None
	7:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	118.00 (118 - 118)	Visual	---	---	---	---	Anticipating runoff from the Rio Salado basin
17-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	943.00 (943 - 943)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
18-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	516.00 (516 - 516)	Measured	---	---	---	---	None
19-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow. There are no field observations for the day.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	228.00 (228 - 228)	Measured	---	---	---	---	None
20-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	375.00 (375 - 375)	Measured	---	---	---	---	None
	13:20	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	70.00 (70 - 70)	Visual	---	---	---	---	None
21-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	156.00 (156 - 156)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
22-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	153.00 (153 - 153)	Measured	---	---	---	---	None
23-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	1060.00 (1060 - 1060)	Measured	---	---	---	---	None
	9:30	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Flow estimate	15.00 (15 - 15)	Visual	---	---	---	---	None
24-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	160.00 (160 - 160)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
25-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	200.00 (200 - 200)	Measured	---	---	---	---	None
	9:30	Rio Grande at River Widening (Bosque del Apache Refuge) (RM 76.57)	Flow estimate	15.00 (15 - 15)	Visual	---	---	---	---	None
26-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations.									
	8:00	Rio Grande at San Acacia USGS Gauge (RM 115.94)	Flow estimate	169.00 (169 - 169)	Measured	---	---	---	---	None
	6:00	Rio Grande at River Widening (Bosque del Apache Refuge) (RM 76.57)	Flow estimate	15.00 (15 - 15)	Visual	---	---	---	---	None
27-Aug-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow and field observations. Runoff from localized rain events is contributing substantially to the recent flow regime in the San Acacia Reach.									
	8:00	Rio Grande at USGS San Acacia Gauge (RM 115.94)	Flow estimate	112.00 (112 - 112)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
28-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at USGS San Acacia Gauge (RM 115.94)	Flow estimate	176.00 (176 - 176)	Measured	---	---	---	---	None
29-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at USGS San Acacia Gauge (RM 115.94)	Flow estimate	96.00 (96 - 96)	Measured	---	---	---	---	None
30-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at USGS San Acacia Gauge (RM 115.94)	Flow estimate	386.00 (386 - 386)	Measured	---	---	---	---	None
31-Aug-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at USGS San Acacia Gauge (RM 115.94)	Flow estimate	133.00 (133 - 133)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
01-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at USGS San Acacia Gauge (RM 115.94)	Flow estimate	88.00 (88 - 88)	Measured	---	---	---	---	None
02-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings of flow.								
	8:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	60.00 (60 - 60)	Measured	---	---	---	---	None
03-Sep-2014	**General Comments:**	Flow in the main channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	6:30	Rio Grande at Hwy 380 (RM 87.1)	Continuous flow	NA	Visual	---	---	---	---	None
	6:00	Rio Grande, 0.1 miles upstream of North Boundary Bosque del Apache pump site (RM 84.33)	Continuous flow	NA	Visual	---	---	---	---	None
	5:30	Rio Grande at Mid-Bosque (Bosque del Apache Refuge) (RM 77)	Continuous flow	NA	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
04-Sep-2014	**General Comments:** Flow in the main channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.									
	6:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	70.00 (70 - 70)	Visual	---	---	---	---	None
	4:30	Rio Grande at River Widening (Bosque del Apache Refuge) (RM 76.57)	Continuous flow	NA	Visual	---	---	---	---	None
05-Sep-2014	**General Comments:** Flow in the main channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.									
	4:30	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	30.00 (30 - 30)	Visual	---	---	---	---	None
	5:00	Rio Grande, 0.01 miles upstream of North Boundary Bosque del Apache Refuge pump site (RM 84.33)	Flow estimate	20.00 (20 - 20)	Visual	---	---	---	---	None
	6:00	Rio Grande at River Widening, Bosque del Apache Refuge (RM 76.57)	Continuous flow	NA	Visual	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
06-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 10.5 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 10.5-mile segment extending south from the North Boundary Bosque del Apache Refuge Pump Site (RM 84.3) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Some 10.5 miles of river have dried since yesterday; this river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.								
	4:30	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	11.00 (11 - 11)	Visual	---	---	---	---	None
	20:00	Rio Grande at North Boundary Bosque del Apache Refuge pump site (RM 84.3)	Top of river drying	0.00 (0 - 0)	Visual	3749566	328971	---	---	None
	8:00	Rio Grande at River Widening, Bosque del Apache Refuge (RM 76.57)	Flow estimate	4.50 (4 - 5)	Visual	---	---	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of North Boundary Bosque del Apache Refuge pump site (RM 73.8)	Bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
07-Sep-2014	**General Comments:**	River is reduced to isolated pools over an 11.0-mile segment extending south from a point 0.5 miles upstream of the North Boundary Bosque del Apache Refuge Pump Site (RM 84.8) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Some 0.5 miles of river have dried since yesterday; this river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.								
	7:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	10.00 (10 - 10)	Visual	---	---	---	---	None
	6:00	Rio Grande, 0.5 miles upstream of North Boundary Bosque del Apache Refuge pump site (RM 84.8)	Top of river drying	0.00 (0 - 0)	Visual	3750588	329199	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	Site not observed this date

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
08-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 13.05 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 13.05-mile segment extending south from a point 0.25 miles downstream of Hwy 380 (RM 86.85) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Some 2.06 miles of river have dried since yesterday; this river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.								
	5:00	Rio Grande, 0.25 miles downstream of Hwy 380 (RM 86.85)	Top of river drying	0.00 (0 - 0)	Visual	3754308	328774	---	---	Some 2.06 miles of river have dried since yesterday
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
09-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 13.05 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 13.05-mile segment extending south from a point 0.25 miles downstream of Hwy 380 (RM 86.85) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). The segment that is reduced to isolated pools is unchanged from yesterday; this river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.								
	5:00	Rio Grande, 0.25 miles downstream of Hwy 380 (RM 86.85)	Top of river drying	0.00 (0 - 0)	Visual	3754308	328774	---	---	Top of river drying is at the same place as yesterday
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	Site was not observed this date

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
10-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 20.07 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 20.07-mile segment extending south from a point 0.125 miles downstream of Brown Arroyo (RM 93.87) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Some 7.02 miles of river have dried since yesterday. This 20.07-mile river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.								
	6:50	Rio Grande, 0.125 miles downstream of Brown Arroyo (RM 93.87)	Top of river drying. Some 7.02 miles of river have dried since yesterday.	0.00 (0 - 0)	Visual	3763812	327281	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	Site was not observed this day
11-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 20.07 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 20.07-mile segment extending south from a point 0.125 miles downstream of Brown Arroyo (RM 93.87) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). The geographic location and extent of river drying is unchanged from yesterday. This 20.07-mile river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.								
	5:50	Rio Grande, 0.125 miles downstream of Brown Arroyo (RM 93.87)	Top of river drying. This location is unchanged from yesterday.	0.00 (0 - 0)	Visual	3763812	327281	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	Site was not observed this day.

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
12-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 20.07 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 20.07-mile segment extending south from a point 0.125 miles downstream of Brown Arroyo (RM 93.87) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). The geographic location and extent of river drying is unchanged from yesterday. This 20.07-mile river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.								
	4:30	Rio Grande, 0.125 miles downstream of Brown Arroyo (RM 93.87)	Top of river drying. This is unchanged from yesterday	0.00 (0 - 0)	Visual	3763812	327281	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	Site was not observed this day.
13-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 21.2 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 21.2-mile segment extending south from a point 1.0 mile upstream of Brown Arroyo (RM 95.0) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). At the top of river drying, some 1.13 miles of river have dried since yesterday. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.								
	7:00	Rio Grande, 1.0 mile upstream of Brown Arroyo (RM 95)	Top of river drying. At the top of river drying, some 1.13 miles of river have dried since yesterday.	0.00 (0 - 0)	Visual	3765308	327773	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	Site was not observed this day.

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
14-Sep-2014	**General Comments:**	River is reduced to isolated pools over a 22.17-mile segment extending south from a point 1.97 miles upstream of Brown Arroyo (RM 95.97) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). At the top of river drying, some 0.97 miles of river have dried since yesterday. Of this drying, 0.54 represents new drying. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.								
	7:41	Rio Grande, 1.97 miles upstream of Brown Arroyo (RM 95.97)	Top of river drying. At the top of river drying, some 0.97 miles of river have dried since yesterday. Of this drying, 0.54 represents new drying.	0.00 (0 - 0)	Visual	3766557	327938	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
15-Sep-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 22.17 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 22.17-mile segment extending south from a point 1.97 miles upstream of Brown Arroyo (RM 95.97) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.								
	7:45	Rio Grande, 1.97 miles upstream of Brown Arroyo (RM 95.97)	Top of river drying. At the top of river drying, some 0.97 miles of river have dried since yesterday. Of this drying, 0.54 represents new drying.	0.00 (0 - 0)	Visual	3766557	327938	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Presumed bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	Site was not observed this day.

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
16-Sep-2014	**General Comments:**	At 0715 hrs, storm water runoff had advanced down the Rio Grande to the USGS Hwy 380 Gauge (RM87.51). As of 1517 hrs, flow in the San Acacia Reach is continuous.								
	7:15	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate. The leading edge of storm water runoff advanced to this point.	480.00 (480 - 480)	Visual	---	---	---	---	None
	14:45	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Flow in the active channel is bank full	NA	Visual	---	---	---	---	None
17-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations. Between 11:00 and 12:00, storm water runoff was observed in the Rio Puerco, Rio Salado, and arroyos south of the San Acacia Diversion.								
	5:30	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	47.00 (47 - 47)	Measured	---	---	---	---	USGS posted flow
18-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:15	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	322.00 (322 - 322)	Measured	---	---	---	---	USGS posted flow

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
19-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	0:30	Rio Grande at San Acacia Gauge (RM 115.94)	Flow estimate	161.00 (161 - 161)	Measured	---	---	---	---	USGS measurement
	1:45	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	300.00 (300 - 300)	Visual	---	---	---	---	None
20-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	0:30	Rio Grande at San Acacia USGS Gauge (RM 115.94)	Flow estimate	161.00 (161 - 161)	Measured	---	---	---	---	None
	1:45	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	300.00 (300 - 300)	Visual	---	---	---	---	None
21-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	0:01	Rio Grande at USGS Hwy 380 Gauge site (RM 87.51)	Flow estimate	47.00 (47 - 47)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	75.00 (75 - 75)	Visual	---	---	---	---	None
	5:30	Rio Grande 0.1 mile upstream of North Boundary Bosque del Apache Pump site (RM 84.33)	Flow estimate	70.00 (70 - 70)	Visual	---	---	---	---	None
	0:01	Rio Grande at San Marcial (RM 68.51)	Flow estimate	41.00 (41 - 41)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
22-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings.								
	5:00	Rio Grande at USGS Hwy 380 Gauge site (RM 87.51)	Flow estimate	156.00 (156 - 156)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	46.00 (46 - 46)	Measured	---	---	---	---	USGS flow estimate
23-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	1920.00 (1920 - 1920)	Measured	---	---	---	---	USGS flow estimate. Flow rising rapidly.
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	46.00 (46 - 46)	Measured	---	---	---	---	USGS flow estimate.
24-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	286.00 (286 - 286)	Measured	---	---	---	---	USGS estimate; flow rising quickly
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	196.00 (196 - 196)	Measured	---	---	---	---	USGS estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
25-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	441.00 (441 - 441)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	832.00 (832 - 832)	Measured	---	---	---	---	USGS flow estimate
26-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings.								
	5:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	352.00 (352 - 352)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	295.00 (295 - 295)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	259.00 (259 - 259)	Measured	---	---	---	---	USGS flow estimate
27-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	314.00 (314 - 314)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at Escondida USGS Gauge (RM 104.11)	Flow estimate	185.00 (185 - 185)	Measured	---	---	---	---	USGS flow estimate
	4:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	300.00 (300 - 300)	Visual	---	---	---	---	None
	5:00	Rio Grande at San Marcial USGS Gauge (RM 68.51)	Flow estimate	442.00 (442 - 442)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
28-Sep-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	283.00 (283 - 283)	Measured	---	---	---	---	USGS Flow estimate
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	122.00 (122 - 122)	Measured	---	---	---	---	USGS Flow estimate
	4:05	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	70.00 (70 - 70)	Visual	---	---	---	---	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	118.00 (118 - 118)	Measured	---	---	---	---	USGS Flow estimate
29-Sep-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at the San Acacia USGS Gauge (RM 115.94)	Flow estimate	316.00 (316 - 316)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	155.00 (155 - 155)	Measured	---	---	---	---	USGS flow estimate
	4:15	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	75.00 (75 - 75)	Visual	---	---	---	---	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	74.00 (74 - 74)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
30-Sep-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	77.00 (77 - 77)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	33.00 (33 - 33)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	77.00 (77 - 77)	Measured	---	---	---	---	USGS flow estimate
01-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	87.00 (87 - 87)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	17.00 (17 - 17)	Measured	---	---	---	---	USGS flow estimate
	5:30	Rio Grande, 0.1 miles upstream of North Boundary Bosque del Apache pump site (RM 84.33)	Flow estimate	20.00 (20 - 20)	Visual	---	---	---	---	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	50.00 (50 - 50)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
02-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	74.00 (74 - 74)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	12.00 (12 - 12)	Measured	---	---	---	---	USGS flow estimate
	3:45	Rio Grande, at "River Widening," Bosque del Apache Refuge (RM 76.57)	Flow estimate	5.00 (5 - 5)	Visual	---	---	---	---	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	40.00 (40 - 40)	Measured	---	---	---	---	USGS flow estimate
03-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at Escondida (RM104.11)	Flow estimate	72.00 (72 - 72)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	7.20 (7.2 - 7.2)	Measured	---	---	---	---	USGS flow estimate
	3:45	Rio Grande, at "River Widening," Bosque del Apache (RM 76.57)	Flow estimate	7.00 (7 - 7)	Visual	---	---	---	---	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	33.00 (33 - 33)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
04-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	70.00 (70 - 70)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	13.00 (13 - 13)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	32.00 (32 - 32)	Measured	---	---	---	---	USGS flow estimate
05-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	70.00 (70 - 70)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	11.00 (11 - 11)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	29.00 (29 - 29)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
06-Oct-2014		**General Comments:**	The river is dry or reduced to isolated pools over a 2.77 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 2.77-mile segment extending south from "River Widening," Bosque del Apache Refuge (RM 76.57) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Some 2.77 miles of river have dried since yesterday; this river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.							
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	70.00 (70 - 70)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	9.90 (9.9 - 9.9)	Measured	---	---	---	---	USGS flow estimate
	3:00	Rio Grande, 0.1 miles upstream of North Boundary Bosque del Apache pump site (RM 84.33)	Flow estimate	15.00 (15 - 15)	Visual	---	---	---	---	None
	4:00	Rio Grande at "River Widening," Bosque del Apache (RM 76.57)	Top of river drying	0.00 (0 - 0)	Visual	3737077	325752	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South del Boundary Bosque Apache Refuge pump site (RM 73.8)	Bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	29.00 (29 - 29)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
07-Oct-2014	**General Comments:**	The river is dry or reduced to isolated pools over a 3.02 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 3.02-mile segment extending south from a point 0.25 miles upstream of "River Widening," Bosque del Apache Refuge (RM 76.82) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Some 0.25 miles of river have dried at the "top of river drying" since yesterday. This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	68.00 (68 - 68)	Measured	---	---	---	---	USGS flow estimate
	7:30	Rio Grande, 0.25 miles upstream of "River Widening," Bosque del Apache (RM 76.82)	Top of river drying. Some 0.25 miles of river have dried at the "top of river drying" since yesterday.	0.00 (0 - 0)	Visual	3737401	325987	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Bottom of river drying.	0.00 (0 - 0)	Visual	---	---	3733044	322937	
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	29.00 (29 - 29)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
08-Oct-2014		**General Comments:**	The river is dry or reduced to isolated pools over a 5.4 mile segment in the San Acacia Reach. River is reduced to isolated pools over a 5.4-mile segment extending south from a point 4.94 miles downstream of North Boundary Bosque del Apache Refuge (RM 79.2) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Some 2.38 miles of river have dried at the "top of river drying" since yesterday. This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.							
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	58.00 (58 - 58)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	7.70 (7.7 - 7.7)	Measured	---	---	---	---	USGS flow estimate
	7:50	Rio Grande, 4.94 miles downstream of North Boundary Bosque Refuge del Apache (RM 79.2)	Top of river drying. Some 2.38 miles of river dried at the "top of river drying" since yesterday.	0.00 (0 - 0)	Visual	3741032	327285	---	---	None
	5:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Bottom of river drying	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	28.00 (28 - 28)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
09-Oct-2014		**General Comments:**	River is reduced to isolated pools over a 5.15-mile segment extending south from a point 4.69 miles downstream of North Boundary Bosque del Apache Refuge (RM 78.95) to a point 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8). Some 0.25 miles of river have rewet at the "top of river drying" since yesterday. This river segment has dried previously this year. Aside from this segment, flow in the main river channel is continuous in the San Acacia Reach.							
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	61.00 (61 - 61)	Measured	---	---	---	---	Flow estimate
	5:00	Rio Grande, at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	12.00 (12 - 12)	Measured	---	---	---	---	Flow estimate
	6:30	Rio Grande, 4.69 miles downstream of North Boundary Bosque del Apache Refuge (RM 78.95)	Top of river drying. Some 0.25 miles of river rewet at the "top of river drying" since yesterday.	0.00 (0 - 0)	Visual	3740734	327030	---	---	None
	0:00	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.89)	Bottom of river drying.	0.00 (0 - 0)	Visual	---	---	3733044	322937	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	30.00 (30 - 30)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
10-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations. Some 5.15 miles of river have rewet since yesterday.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	61.00 (61 - 61)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	24.00 (24 - 24)	Measured	---	---	---	---	USGS flow estimate
	4:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	37.50 (35 - 40)	Visual	---	---	---	---	None
	4:30	Rio Grande, 0.1 mile upstream of South Boundary Bosque del Apache Refuge pump site (RM 73.8)	Continuous flow	NA	Visual	---	---	---	---	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	29.00 (29 - 29)	Measured	---	---	---	---	USGS flow estimate
11-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	115.00 (115 - 115)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	50.00 (50 - 50)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	86.00 (86 - 86)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
12-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	120.00 (120 - 120)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	65.00 (65 - 65)	Visual	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	36.00 (36 - 36)	Visual	---	---	---	---	USGS flow estimate
13-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	324.00 (324 - 324)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	294.00 (294 - 294)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	156.00 (156 - 156)	Measured	---	---	---	---	USGS flow estimate
14-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	247.00 (247 - 247)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	278.00 (278 - 278)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	263.00 (263 - 263)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
15-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	191.00 (191 - 191)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	268.00 (268 - 268)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	175.00 (175 - 175)	Measured	---	---	---	---	USGS flow estimate
16-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	197.00 (197 - 197)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande, at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	131.00 (131 - 131)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	100.00 (100 - 100)	Measured	---	---	---	---	USGS flow estimate
17-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	185.00 (185 - 185)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	126.00 (126 - 126)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	81.00 (81 - 81)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
18-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	128.00 (128 - 128)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	133.00 (133 - 133)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	59.00 (59 - 59)	Measured	---	---	---	---	USGS flow estimate
19-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	243.00 (243 - 243)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	122.00 (122 - 122)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	82.00 (82 - 82)	Measured	---	---	---	---	USGS flow estimate
20-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations. San Pedro Arroyo carried runoff from localized storms to the Rio Grande at RM 87.11 for a few hours in the evening.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	211.00 (211 - 211)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	126.00 (126 - 126)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	72.00 (72 - 72)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
21-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	255.00 (255 - 255)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	144.00 (144 - 144)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcia (RM 68.51)	Flow estimate	55.00 (55 - 55)	Measured	---	---	---	---	USGS flow estimate
22-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations. Pumps are being dismantled, presumably for the year.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	215.00 (215 - 215)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	120.00 (120 - 120)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	62.00 (62 - 62)	Measured	---	---	---	---	USGS flow estimate
23-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	219.00 (219 - 219)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	128.00 (128 - 128)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	48.00 (48 - 48)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
24-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	137.00 (137 - 137)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	149.00 (149 - 149)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	102.00 (102 - 102)	Measured	---	---	---	---	USGS flow estimate
25-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	139.00 (139 - 139)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	110.00 (110 - 110)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	115.00 (115 - 115)	Visual	---	---	---	---	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	54.00 (54 - 54)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
26-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	98.00 (98 - 98)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	98.00 (98 - 98)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	45.00 (45 - 45)	Measured	---	---	---	---	USGS flow estimate
27-Oct-2014	**General Comments:**	Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.								
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	106.00 (106 - 106)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	106.00 (106 - 106)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	100.00 (100 - 100)	Visual	---	---	---	---	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	36.00 (36 - 36)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
28-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	137.00 (137 - 137)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	104.00 (104 - 104)	Measured	---	---	---	---	USGS flow estimate
	6:00	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	100.00 (100 - 100)	Visual	---	---	---	---	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	55.00 (55 - 55)	Measured	---	---	---	---	USGS flow estimate
29-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	137.00 (137 - 137)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	118.00 (118 - 118)	Measured	---	---	---	---	USGS flow estimate
	2:10	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	80.00 (80 - 80)	Visual	---	---	---	---	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	50.00 (50 - 50)	Measured	---	---	---	---	USGS flow estimate

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

San Acacia Reach

Date	Time	Location*	Observation	Estimated Flow (cfs) Avg (Range)	Flow Estimate Type	River Drying GIS Coordinates (UTM NAD 1983, Zone 13) Top (N - E)		Bottom (N - E)		Comments
30-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	147.00 (147 - 147)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	98.00 (98 - 98)	Measured	---	---	---	---	USGS flow estimate
	2:10	Rio Grande at Hwy 380 (RM 87.1)	Flow estimate	75.00 (75 - 75)	Visual	---	---	---	---	None
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	58.00 (58 - 58)	Measured	---	---	---	---	USGS flow estimate
31-Oct-2014	**General Comments:** Flow in the main river channel is believed to be continuous throughout the San Acacia Reach based on USGS internet postings and field observations.									
	5:00	Rio Grande at Escondida (RM 104.11)	Flow estimate	150.00 (150 - 150)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at the USGS Hwy 380 Gauge (RM 87.51)	Flow estimate	118.00 (118 - 118)	Measured	---	---	---	---	USGS flow estimate
	5:00	Rio Grande at San Marcial (RM 68.51)	Flow estimate	65.00 (65 - 65)	Measured	---	---	---	---	None

* For reference, the Los Lunas Bridge over the Rio Grande (NM 49) is at RM 161.4, the Los Chavez Wasteway is at RM 156.7, the Peralta Wasteway is at RM 152.5, and the Belen Bridge over the Rio Grande (NM 6) is at RM 149.5, U.S. Highway 380 is at RM 87.1, South Boundary Bosque del Apache Refuge pump channel is at RM 73.7, and Fort Craig is at RM 64.8.

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APPENDIX C.
MIDDLE RIO GRANDE 2014 PUMPING OPERATIONS

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Bureau Of Reclamation
Middle Rio Grande Pumping Operations - 2014

Pump Site	Month	Date	AM / PM	Number of Pumps Operating	Calculated Flow Estimate (cfs) *	Comment
Neil Cupp	March					
		24-Mar-2014	AM	0	0	None
		31-Mar-2014	AM	0	0	None
Neil Cupp	April					
		02-Apr-2014	AM	0	0	None
		04-Apr-2014	AM	0	0	None
		07-Apr-2014	AM	0	0	None
		11-Apr-2014	AM	0	0	None
		14-Apr-2014	AM	0	0	None
		16-Apr-2014	AM	0	0	None
		18-Apr-2014	AM	0	0	None
		21-Apr-2014	AM	0	0	None
		24-Apr-2014	AM	0	0	None
		25-Apr-2014	AM	0	0	None
		28-Apr-2014	AM	0	0	None
		30-Apr-2014	AM	0	0	None
Neil Cupp	May					
		02-May-2014	AM	0	0	None
		05-May-2014	AM	0	0	None
		07-May-2014	AM	0	0	None
		09-May-2014	AM	0	0	None
		12-May-2014	AM	0	0	None
		14-May-2014	AM	0	0	None
		16-May-2014	AM	0	0	None
		19-May-2014	AM	0	0	None
		21-May-2014	AM	0	0	None
		23-May-2014	AM	0	0	None
		27-May-2014	AM	0	0	None
		30-May-2014	AM	0	0	None

**** Flow is estimated by calculation. If only one pump is running, flow is the product of the number of pumps times 11 cfs. If more than one pump is running, flow is the product of the number of pumps times 7 cfs.***

Pump Site	Month	Date	AM / PM	Number of Pumps Operating	Calculated Flow Estimate (cfs) *	Comment
Neil Cupp	June					
		04-Jun-2014	AM	0	0	None
		06-Jun-2014	AM	0	0	None
		09-Jun-2014	AM	0	0	None
		11-Jun-2014	AM	0	0	None
		13-Jun-2014	AM	0	0	None
		16-Jun-2014	AM	0	0	None
		18-Jun-2014	AM	0	0	None
		19-Jun-2014	AM	0	0	None
		20-Jun-2014	AM	0	0	None
		23-Jun-2014	AM	0	0	None
		25-Jun-2014	AM	0	0	None
		27-Jun-2014	AM	0	0	None
		30-Jun-2014	AM	0	0	None
		30-Jun-2014	AM	0	0	None
Neil Cupp	July					
		02-Jul-2014	AM	0	0	None
		03-Jul-2014	AM	0	0	None
		07-Jul-2014	AM	0	0	None
		09-Jul-2014	AM	0	0	None
		11-Jul-2014	AM	0	0	None
		14-Jul-2014	AM	0	0	None
		16-Jul-2014	AM	0	0	None
		18-Jul-2014	AM	0	0	None
		21-Jul-2014	AM	0	0	None
		23-Jul-2014	AM	0	0	None
		25-Jul-2014	AM	0	0	None
		28-Jul-2014	AM	0	0	None

**** Flow is estimated by calculation. If only one pump is running, flow is the product of the number of pumps times 11 cfs. If more than one pump is running, flow is the product of the number of pumps times 7 cfs.***

Pump Site	Month	Date	AM / PM	Number of Pumps Operating	Calculated Flow Estimate (cfs) *	Comment
Neil Cupp	August					
		01-Aug-2014	AM	0	0	None
		04-Aug-2014	AM	0	0	None
		06-Aug-2014	AM	0	0	None
		08-Aug-2014	AM	0	0	None
		11-Aug-2014	AM	0	0	None
		13-Aug-2014	AM	0	0	None
		15-Aug-2014	AM	0	0	None
		18-Aug-2014	AM	0	0	None
		20-Aug-2014	AM	0	0	None
		22-Aug-2014	AM	0	0	None
		25-Aug-2014	AM	0	0	None
		27-Aug-2014	AM	0	0	None
		29-Aug-2014	AM	0	0	None
Neil Cupp	September					
		02-Sep-2014	AM	0	0	None
		05-Sep-2014	AM	0	0	None
		08-Sep-2014	AM	0	0	None
		10-Sep-2014	AM	0	0	None
		12-Sep-2014	AM	0	0	None
		15-Sep-2014	AM	0	0	None
		17-Sep-2014	AM	0	0	None
		19-Sep-2014	AM	0	0	None
		22-Sep-2014	AM	0	0	None
		24-Sep-2014	AM	0	0	None
		26-Sep-2014	AM	0	0	None
		29-Sep-2014	AM	0	0	None

**** Flow is estimated by calculation. If only one pump is running, flow is the product of the number of pumps times 11 cfs. If more than one pump is running, flow is the product of the number of pumps times 7 cfs.***

Pump Site	Month	Date	AM / PM	Number of Pumps Operating	Calculated Flow Estimate (cfs) *	Comment
Neil Cupp	October					
		01-Oct-2014	AM	0	0	None
		03-Oct-2014	AM	0	0	None
		06-Oct-2014	AM	0	0	None
		08-Oct-2014	AM	0	0	None
		10-Oct-2014	AM	0	0	None
		14-Oct-2014	AM	0	0	None
		17-Oct-2014	AM	0	0	None
		20-Oct-2014	AM	0	0	None
		24-Oct-2014	AM	0	0	None
		27-Oct-2014	AM	0	0	None
		31-Oct-2014	AM	0	0	None

**** Flow is estimated by calculation. If only one pump is running, flow is the product of the number of pumps times 11 cfs. If more than one pump is running, flow is the product of the number of pumps times 7 cfs.***

Pump Site	Month	Date	AM / PM	Number of Pumps Operating	Calculated Flow Estimate (cfs) *	Comment
North Boundary	March					
		24-Mar-2014	AM	0	0	None
		31-Mar-2014	AM	2	14	None
North Boundary	April					
		02-Apr-2014	AM	1	11	None
		04-Apr-2014	AM	2	14	None
		07-Apr-2014	AM	2	14	None
		11-Apr-2014	AM	3	21	None
		14-Apr-2014	AM	3	21	None
		16-Apr-2014	AM	3	21	None
		18-Apr-2014	AM	3	21	None
		21-Apr-2014	AM	3	21	None
		24-Apr-2014	AM	3	21	None
		25-Apr-2014	AM	3	21	None
		28-Apr-2014	AM	3	21	None
		30-Apr-2014	AM	3	21	None
North Boundary	May					
		02-May-2014	AM	3	21	None
		05-May-2014	AM	3	21	None
		07-May-2014	AM	3	21	None
		09-May-2014	AM	3	21	None
		12-May-2014	AM	0	0	None
		14-May-2014	AM	0	0	None
		16-May-2014	AM	0	0	None
		19-May-2014	AM	0	0	None
		21-May-2014	AM	0	0	None
		23-May-2014	AM	0	0	None
		27-May-2014	AM	3	21	Going to 0 pumps today
		30-May-2014	AM	0	0	None

**** Flow is estimated by calculation. If only one pump is running, flow is the product of the number of pumps times 11 cfs. If more than one pump is running, flow is the product of the number of pumps times 7 cfs.***

Pump Site	Month	Date	AM / PM	Number of Pumps Operating	Calculated Flow Estimate (cfs) *	Comment
North Boundary	June					
		04-Jun-2014	AM	3	21	None
		06-Jun-2014	AM	3	21	None
		09-Jun-2014	AM	0	0	None
		11-Jun-2014	AM	3	21	None
		13-Jun-2014	AM	3	21	None
		16-Jun-2014	AM	3	21	None
		18-Jun-2014	AM	3	21	None
		19-Jun-2014	AM	3	21	None
		20-Jun-2014	AM	3	21	None
		23-Jun-2014	AM	0	0	None
		25-Jun-2014	AM	0	0	None
		27-Jun-2014	AM	0	0	None
		30-Jun-2014	AM	0	0	None
		30-Jun-2014	AM	0	0	None
North Boundary	July					
		02-Jul-2014	AM	0	0	None
		03-Jul-2014	AM	0	0	None
		07-Jul-2014	AM	0	0	None
		09-Jul-2014	AM	0	0	None
		11-Jul-2014	AM	0	0	None
		14-Jul-2014	AM	0	0	None
		16-Jul-2014	AM	0	0	None
		18-Jul-2014	AM	0	0	None
		21-Jul-2014	AM	0	0	None
		23-Jul-2014	AM	0	0	None
		25-Jul-2014	AM	0	0	None
		28-Jul-2014	AM	3	21	None

**** Flow is estimated by calculation. If only one pump is running, flow is the product of the number of pumps times 11 cfs. If more than one pump is running, flow is the product of the number of pumps times 7 cfs.***

Pump Site	Month	Date	AM / PM	Number of Pumps Operating	Calculated Flow Estimate (cfs) *	Comment
North Boundary	August					
		01-Aug-2014	AM	0	0	None
		04-Aug-2014	AM	0	0	None
		06-Aug-2014	AM	0	0	None
		08-Aug-2014	AM	0	0	None
		11-Aug-2014	AM	0	0	None
		13-Aug-2014	AM	0	0	None
		15-Aug-2014	AM	0	0	None
		18-Aug-2014	AM	0	0	None
		20-Aug-2014	AM	0	0	None
		22-Aug-2014	AM	0	0	None
		25-Aug-2014	AM	0	0	None
		27-Aug-2014	AM	0	0	None
		29-Aug-2014	AM	0	0	None
North Boundary	September					
		02-Sep-2014	AM	0	0	None
		05-Sep-2014	AM	0	0	None
		08-Sep-2014	AM	0	0	None
		10-Sep-2014	AM	0	0	None
		12-Sep-2014	AM	0	0	None
		15-Sep-2014	AM	0	0	None
		17-Sep-2014	AM	0	0	None
		19-Sep-2014	AM	0	0	None
		22-Sep-2014	AM	0	0	None
		24-Sep-2014	AM	0	0	None
		26-Sep-2014	AM	0	0	None
		29-Sep-2014	AM	0	0	None

**** Flow is estimated by calculation. If only one pump is running, flow is the product of the number of pumps times 11 cfs. If more than one pump is running, flow is the product of the number of pumps times 7 cfs.***

Pump Site	Month	Date	AM / PM	Number of Pumps Operating	Calculated Flow Estimate (cfs) *	Comment
North Boundary	October					
		01-Oct-2014	AM	0	0	None
		03-Oct-2014	AM	0	0	None
		06-Oct-2014	AM	0	0	None
		08-Oct-2014	AM	0	0	None
		10-Oct-2014	AM	0	0	None
		14-Oct-2014	AM	0	0	None
		17-Oct-2014	AM	0	0	None
		20-Oct-2014	AM	0	0	None
		24-Oct-2014	AM	0	0	None
		27-Oct-2014	AM	0	0	None
		31-Oct-2014	AM	0	0	None

**** Flow is estimated by calculation. If only one pump is running, flow is the product of the number of pumps times 11 cfs. If more than one pump is running, flow is the product of the number of pumps times 7 cfs.***

Pump Site	Month	Date	AM / PM	Number of Pumps Operating	Calculated Flow Estimate (cfs) *	Comment
South Boundary	March					
		24-Mar-2014	AM	0	0	None
		31-Mar-2014	AM	3	21	None
South Boundary	April					
		02-Apr-2014	AM	3	21	None
		04-Apr-2014	AM	3	21	None
		07-Apr-2014	AM	3	21	None
		11-Apr-2014	AM	3	21	None
		14-Apr-2014	AM	3	21	None
		16-Apr-2014	AM	3	21	None
		18-Apr-2014	AM	3	21	None
		21-Apr-2014	AM	3	21	None
		24-Apr-2014	AM	3	21	None
		25-Apr-2014	AM	3	21	None
		28-Apr-2014	AM	3	21	None
		30-Apr-2014	AM	3	21	None
South Boundary	May					
		02-May-2014	AM	3	21	None
		05-May-2014	AM	3	21	None
		07-May-2014	AM	3	21	None
		09-May-2014	AM	3	21	None
		12-May-2014	AM	0	0	None
		14-May-2014	AM	0	0	None
		16-May-2014	AM	0	0	None
		19-May-2014	AM	0	0	None
		21-May-2014	AM	0	0	None
		23-May-2014	AM	0	0	None
		27-May-2014	AM	3	21	Going to 0 pumps today
		30-May-2014	AM	0	0	None

**** Flow is estimated by calculation. If only one pump is running, flow is the product of the number of pumps times 11 cfs. If more than one pump is running, flow is the product of the number of pumps times 7 cfs.***

Pump Site	Month	Date	AM / PM	Number of Pumps Operating	Calculated Flow Estimate (cfs) *	Comment
South Boundary	June					
		04-Jun-2014	AM	3	21	None
		06-Jun-2014	AM	3	21	None
		09-Jun-2014	AM	1	11	None
		11-Jun-2014	AM	3	21	None
		13-Jun-2014	AM	3	21	None
		16-Jun-2014	AM	3	21	None
		18-Jun-2014	AM	3	21	None
		19-Jun-2014	AM	3	21	None
		20-Jun-2014	AM	3	21	None
		23-Jun-2014	AM	3	21	None
		25-Jun-2014	AM	3	21	None
		27-Jun-2014	AM	3	21	None
		30-Jun-2014	AM	1	11	None
		30-Jun-2014	AM	3	21	None
South Boundary	July					
		02-Jul-2014	AM	3	21	None
		03-Jul-2014	AM	3	21	None
		07-Jul-2014	AM	3	21	None
		09-Jul-2014	AM	3	21	None
		11-Jul-2014	AM	3	21	None
		14-Jul-2014	AM	3	21	None
		16-Jul-2014	AM	3	21	Going to one pump today
		18-Jul-2014	AM	1	11	None
		21-Jul-2014	AM	1	11	None
		23-Jul-2014	AM	1	11	None
		25-Jul-2014	AM	1	11	None
		28-Jul-2014	AM	1	11	None

**** Flow is estimated by calculation. If only one pump is running, flow is the product of the number of pumps times 11 cfs. If more than one pump is running, flow is the product of the number of pumps times 7 cfs.***

Pump Site	Month	Date	AM / PM	Number of Pumps Operating	Calculated Flow Estimate (cfs) *	Comment
South Boundary	August					
		01-Aug-2014	AM	2	14	None
		04-Aug-2014	AM	1	11	None
		06-Aug-2014	AM	1	11	None
		08-Aug-2014	AM	1	11	None
		11-Aug-2014	AM	1	11	None
		13-Aug-2014	AM	1	11	None
		15-Aug-2014	AM	1	11	None
		18-Aug-2014	AM	1	11	None
		20-Aug-2014	AM	1	11	None
		22-Aug-2014	AM	3	21	None
		25-Aug-2014	AM	3	21	None
		27-Aug-2014	AM	3	21	Going to 1 pump today
		29-Aug-2014	AM	1	11	None
South Boundary	September					
		02-Sep-2014	AM	1	11	None
		05-Sep-2014	AM	3	21	None
		08-Sep-2014	AM	3	21	None
		10-Sep-2014	AM	3	21	None
		12-Sep-2014	AM	3	21	None
		15-Sep-2014	AM	3	21	None
		17-Sep-2014	AM	3	21	None
		19-Sep-2014	AM	3	21	Going to 1 pump today
		22-Sep-2014	AM	3	21	None
		24-Sep-2014	AM	1	11	None
		26-Sep-2014	AM	1	11	None
		29-Sep-2014	AM	1	11	None

**** Flow is estimated by calculation. If only one pump is running, flow is the product of the number of pumps times 11 cfs. If more than one pump is running, flow is the product of the number of pumps times 7 cfs.***

Pump Site	Month	Date	AM / PM	Number of Pumps Operating	Calculated Flow Estimate (cfs) *	Comment
South Boundary	**October**					
		01-Oct-2014	AM	3	21	None
		03-Oct-2014	AM	3	21	None
		06-Oct-2014	AM	3	21	None
		08-Oct-2014	AM	3	21	None
		10-Oct-2014	AM	3	21	None
		14-Oct-2014	AM	1	11	None
		17-Oct-2014	AM	1	11	None
		20-Oct-2014	AM	1	11	None
		24-Oct-2014	AM	0	0	None
		27-Oct-2014	AM	2	14	None
		31-Oct-2014	AM	2	14	going to 1 today and 0 tomorrow

**** Flow is estimated by calculation. If only one pump is running, flow is the product of the number of pumps times 11 cfs. If more than one pump is running, flow is the product of the number of pumps times 7 cfs.***

APPENDIX D.
SPREADSHEET ACCOUNTS OF 2014 RIVEREYES OBSERVATIONS

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April 2014 – Isleta Reach

		Day of Month																												
	RM	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
Isleta Diversion 169.3	169.0																														
	168.5																														
	168.0																														
	167.5																														
	167.0																														
Alehandro Drain 166.5	166.5																														
USGSS Gauge at Bosque Farms(CFS)			182		208			182				200			209		203		206			165			224	195			203		200
	166.0																														
240 W W 165.5	165.5																														
	165.0																														
Cottonwood Rd 164.5	164.5																														
	164.0																														
	163.5																														
	163.0																														
	162.5																														
	162.0																														
	161.5																														
Los Lunas (NM 49) 160.8	161.0																														
	160.5																														
	160.0																														
	159.5																														
	159.0																														
	158.5																														
El Cerro Tome / Los Lunas Airport	158.0																														
	157.5																														
Los Lunas River Widening	157.0																														
Los Chavez WW	156.5																														
	156.0																														
	155.5																														
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	154.0																														
	153.5																														
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Peralta W W 152.5	152.5																														
	152.0																														
	151.5																														
	151.0																														
	150.5																														
LP1DR (Allsups)	150.0																														
	RM	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
Belen Br (NM 6 Hwy 309) 149.5	149.5																														
	149.0																														
	148.5																														
	148.0																														
AT&SF RR 147.7	147.5																														
	147.0																														
	146.5																														
	146.0																														
	145.5																														
	145.0																														
LP2DR 144.7	144.5																														
	144.0																														
Aerial Gas Line 143.8	143.5																														
	143.0																														
	142.5																														
	142.0																														
	141.5																														
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Jarales Rd Br 140.8	140.5																														
Storrie W W 140.1	140.0																														
	139.5																														
	139.0																														
Abo Arroyo 138.8	138.5																														
	138.0																														
	137.5																														
	137.0																														
	136.5																														
	136.0																														
	135.5																														
	135.0																														
	134.5																														
Abeytas Heading 134.3	134.0																														
	133.5																														
	133.0																														
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	132.0																														
	131.5																														
Just Upstream of Bernardo	131.0																														

May 2014 – Isleta Reach

		Day of Month																													
	RM	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
Isleta Diversion 169.3	169.0																															
	168.5																															
	168.0																															
	167.5																															
	167.0																															
Alehandro Drain 166.5	166.5																															
USGS Gauge at Bosque Farms(CFS)			191			191		187		813			1430		1620		1160			797		429		260				721			714	
	166.0																															
240 W W 165.5	165.5																															
	165.0																															
Cottonwood Rd 164.5	164.5																															
	164.0																															
	163.5																															
	163.0																															
	162.5																															
	162.0																															
	161.5																															
Los Lunas (NM 49) 160.8	161.0																															
	160.5																															
	160.0																															
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	159.0																															
	158.5																															
El Cerro Tome / Los Lunas Airport	158.0																															
	157.5																															
Los Lunas River Widening	157.0																															
Los Chavez WW	156.5																															
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Peralta W W 152.5	152.5																															
	152.0																															
	151.5																															
	151.0																															
	150.5																															
LP1DR (Allsups)	150.0																															
	RM	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
Belen Br (NM 6 Hwy 309) 149.5	149.5																															
	149.0																															
	148.5																															
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AT&SF RR 147.7	147.5																															
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	145.5																															
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LP2DR 144.7	144.5																															
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Aerial Gas Line 143.8	143.5																															
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	142.5																															
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	141.0																															
Jarales Rd Br 140.8	140.5																															
Storrie W W 140.1	140.0																															
	139.5																															
	139.0																															
Abo Arroyo 138.8	138.5																															
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	136.5																															
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Abeytas Heading 134.3	134.0																															
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Just Upstream of Bernardo	131.0																															

June 2014 – Isleta Reach

		Day of Month																												
	RM	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
Isleta Diversion 169.3	169.0																														
	168.5																														
	168.0																														
	167.5																														
	167.0																														
Alehandro Drain 166.5	166.5																														
USGSS Gauge at Bosque Farms(CFS)					280		1040			526		486		287			224		200	195	195			247		191		142			251
	166.0																														
240 W W 165.5	165.5																														
	165.0																														
Cottonwood Rd 164.5	164.5																														
	164.0																														
	163.5																														
	163.0																														
	162.5																														
	162.0																														
	161.5																														
Los Lunas (NM 49) 160.8	161.0																														
	160.5																														
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	158.5																														
El Cerro Tome / Los Lunas Airport	158.0																														
	157.5																														
Los Lunas River Widening	157.0																														
Los Chavez WW	156.5																														
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	154.5																														
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Peralta W W 152.5	152.5																														
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	151.5																														
	151.0																														
	150.5																														
LP1DR (Allsups)	150.0																														
	RM	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
Belen Br (NM 6 Hwy 309) 149.5	149.5																														
	149.0																														
	148.5																														
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AT&SF RR 147.7	147.5																														
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LP2DR 144.7	144.5																														
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Aerial Gas Line 143.8	143.5																														
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Jarales Rd Br 140.8	140.5																														
Storrie W W 140.1	140.0																														
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Abo Arroyo 138.8	138.5																														
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Abeytas Heading 134.3	134.0																														
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	131.5																														
Just Upstream of Bernardo	131.0																														

Note: Cells shaded "red" indicate river drying on a given date and at a given half-mile river segment. Numbers in the blue-colored row are instantaneous estimates of flow at a given flow at the indicated gauge site as reported by the U.S. Army Corps of Engineers during morning water operations conference calls.

July 2014 – Isleta Reach

		Day of Month																													
	RM	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
Isleta Diversion 169.3	169.0																															
	168.5																															
	168.0																															
	167.5																															
	167.0																															
Alehandro Drain 166.5	166.5																															
USGS Gauge at Bosque Farms(CFS)			62	108				169		99		105			215		551		1030			845		108		126			96			
	166.0																															
240 W W 165.5	165.5																															
	165.0																															
Cottonwood Rd 164.5	164.5																															
	164.0																															
	163.5																															
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Los Lunas (NM 49) 160.8	161.0																															
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	159.0																															
	158.5																															
El Cerro Tome / Los Lunas Airport	158.0																															
	157.5																															
Los Lunas River Widening	157.0																															
Los Chavez WW (RM 156.7)	156.5																															
	156.0																															
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Peralta W W 152.5	152.5																															
	152.0																															
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	150.5																															
LP1DR (Allsups)	150.0																															
	RM	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
Belen Br (NM 6 Hwy 309) 149.5	149.5																															
	149.0																															
	148.5																															
	148.0																															
AT&SF RR 147.7	147.5																															
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LP2DR 144.7	144.5																															
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Aerial Gas Line 143.8	143.5																															
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Jarales Rd Br 140.8	140.5																															
Storrie W W 140.1	140.0																															
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Abo Arroyo 138.8	138.5																															
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Abeytas Heading 134.3	134.0																															
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	131.5																															
Just Upstream of Bernardo	131.0																															

Note: Cells shaded "red" indicate river drying on a given date and at a given half-mile river segment. Numbers in the blue-colored row are instantaneous estimates of flow at a given flow at the indicated gauge site as reported by the U.S. Army Corps of Engineers during morning water operations conference calls.

August 2014 – Isleta Reach

		Day of Month																												
	RM	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
Isleta Diversion 169.3	169.0																															
	168.5																															
	168.0																															
	167.5																															
	167.0																															
Alehandro Drain 166.5	166.5																															
USGSS Gauge @Bosque Farms(CFS)		294			###		596		425			169		142		99			99		94		85			88		88		99		
	166.0																															
240 W W 165.5	165.5																															
	165.0																															
Cottonwood Rd 164.5	164.5																															
	164.0																															
	163.5																															
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	162.5																															
	162.0																															
	161.5																															
Los Lunas (NM 49) 160.8	161.0																															
	160.5																															
	160.0																															
	159.5																															
	159.0																															
	158.5																															
El Cerro Tome / Los Lunas Airport	158.0																															
	157.5																															
Los Lunas River Widening	157.0																															
Los Chavez WW	156.5																															
	156.0																															
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Peralta W W 152.5	152.5																															
	152.0																															
	151.5																															
	151.0																															
	150.5																															
LP1DR (Allsups)	150.0																															
	RM	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
Belen Br (NM 6 Hwy 309) 149.5	149.5																															
	149.0																															
	148.5																															
	148.0																															
AT&SF RR 147.7	147.5																															
	147.0																															
	146.5																															
	146.0																															
	145.5																															
	145.0																															
LP2DR 144.7	144.5																															
	144.0																															
Aerial Gas Line 143.8	143.5																															
	143.0																															
	142.5																															
	142.0																															
	141.5																															
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Jarales Rd Br 140.8	140.5																															
Storrie W W 140.1	140.0																															
	139.5																															
	139.0																															
Abo Arroyo 138.8	138.5																															
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Abeytas Heading 134.3	134.0																															
	133.5																															
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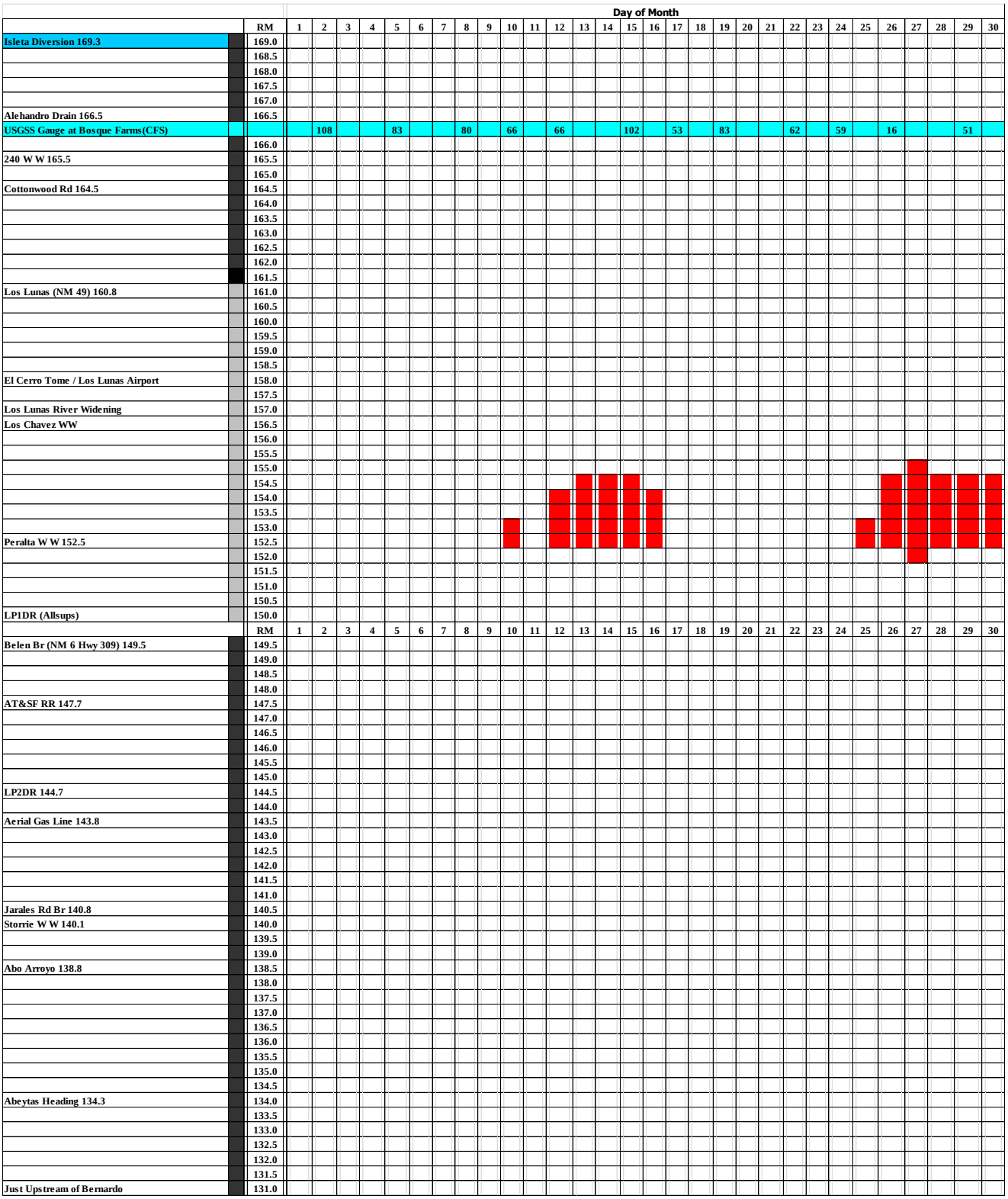
	132.0																															
	131.5																															
Just Upstream of Bernardo	131.0																															

Note: Cells shaded "red" indicate river drying on a given date and at a given half-mile river segment. Numbers in the blue-colored row are instantaneous estimates of flow at a given flow at the indicated gauge site as reported by the U.S. Army Corps of Engineers during morning water operations conference calls.

September 2014 – Isleta Reach



Note: Cells shaded "red" indicate river drying on a given date and at a given half-mile river segment. Numbers in the blue-colored row are instantaneous estimates of flow at a given flow at the indicated gauge site as reported by the U.S. Army Corps of Engineers during morning water operations conference calls.

October 2014 – Isleta Reach

		Day of Month																												
	RM	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
Isleta Diversion 169.3	169.0																															
	168.5																															
	168.0																															
	167.5																															
	167.0																															
Alehandro Drain 166.5	166.5																															
USGSS Gauge at Bosque Farms(CFS)		41		29			48		46		42				111			115			111				96			99				178
	166.0																															
240 W W 165.5	165.5																															
	165.0																															
Cottonwood Rd 164.5	164.5																															
	164.0																															
	163.5																															
	163.0																															
	162.5																															
	162.0																															
	161.5																															
Los Lunas (NM 49) 160.8	161.0																															
	160.5																															
	160.0																															
	159.5																															
	159.0																															
	158.5																															
El Cerro Tome / Los Lunas Airport	158.0																															
	157.5																															
Los Lunas River Widening	157.0																															
Los Chavez WW	156.5																															
	156.0																															
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	155.0																															
	154.5																															
	154.0																															
	153.5																															
	153.0																															
Peralta W W 152.5	152.5																															
	152.0																															
	151.5																															
	151.0																															
	150.5																															
LP1DR (Allsups)	150.0																															
	RM	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
Belen Br (NM 6 Hwy 309) 149.5	149.5																															
	149.0																															
	148.5																															
	148.0																															
AT&SF RR 147.7	147.5																															
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	146.5																															
	146.0																															
	145.5																															
	145.0																															
LP2DR 144.7	144.5																															
	144.0																															
Aerial Gas Line 143.8	143.5																															
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	142.5																															
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Jarales Rd Br 140.8	140.5																															
Storrie W W 140.1	140.0																															
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Abo Arroyo 138.8	138.5																															
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Abeytas Heading 134.3	134.0																															
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	131.5																															
Just Upstream of Bernardo	131.0																															

Note: Cells shaded "red" indicate river drying on a given date and at a given half-mile river segment. Numbers in the blue-colored row are instantaneous estimates of flow at a given flow at the indicated gauge site as reported by the U.S. Army Corps of Engineers during morning water operations conference calls.

April 2014 – San Acacia Reach

		Day of Month																												
	RM	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
San Acacia 116.2 (CFS)	116.0		193		196			203				150			145		153		173			179			205	198			196		391
	115.5																														
	115.0																														
One Mile Stop 114.8	114.5																														
	114.0																														
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	112.5																														
	112.0																														
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	108.5																														
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	107.5																														
Lemitar Diversion 107.1	107.0																														
	106.5																														
	106.0																														
	105.5																														
LFCC Outfall (9 mile)	105.0																														
Escondida Br 104.8	104.5																														
	104.0																														
	103.5																														
	103.0																														
N. Socorro Div. Channel 102.5	102.5																														
	102.0																														
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Escondida Drain Outfall 101.1	101.0																														
	100.5																														
	100.0																														
	99.5																														
	RM	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
Otero Street 99.2	99.0																														
	98.5																														
	98.0																														
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	96.5																														
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Brown Arroyo 94.1	94.0																														
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Neil Cupp	90.5																														
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	88.0																														
	87.5																														
	RM	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
San Antonio (U.S. 380) 87.1	87.0																														
	86.5																														
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	84.5																														
N BDA 84.2	84.0																														
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	79.0																														
BDA HQ 78.75	78.5																														
	78.0																														
	77.5																														
	77.0																														
Mid BDA Pumps (Old Site)	76.5																														
	76.0																														
	75.5																														
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	74.5																														
S BDA	74.0																														

Note: Cells shaded "red" indicate river drying on a given date and at a given half-mile river segment. Numbers in the blue-colored row are instantaneous estimates of flow at a given flow at the indicated gauge site as reported by the U.S. Army Corps of Engineers during morning water operations conference calls.

May 2014 – San Acacia Reach

		Day of Month																													
	RM	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
San Acacia 116.2 (CFS)	116.0		266			176		176		184			950		1140		1010			809		633		388				646			534	
	115.5																															
	115.0																															
One Mile Stop 114.8	114.5																															
	114.0																															
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	107.5																															
Lemitar Diversion 107.1	107.0																															
	106.5																															
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	105.5																															
LFCC Outfall (9 mile)	105.0																															
Escondida Br 104.8	104.5																															
	104.0																															
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N. Socorro Div. Channel 102.5	102.5																															
	102.0																															
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Escondida Drain Outfall 101.1	101.0																															
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	RM	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
Otero Street 99.2	99.0																															
	98.5																															
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Brown Arroyo 94.1	94.0																															
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	RM	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
San Antonio (U.S. 380) 87.1	87.0																															
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N BDA 84.2	84.0																															
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BDA HQ 78.75	78.5																															
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Mid BDA Pumps (Old Site)	76.5																															
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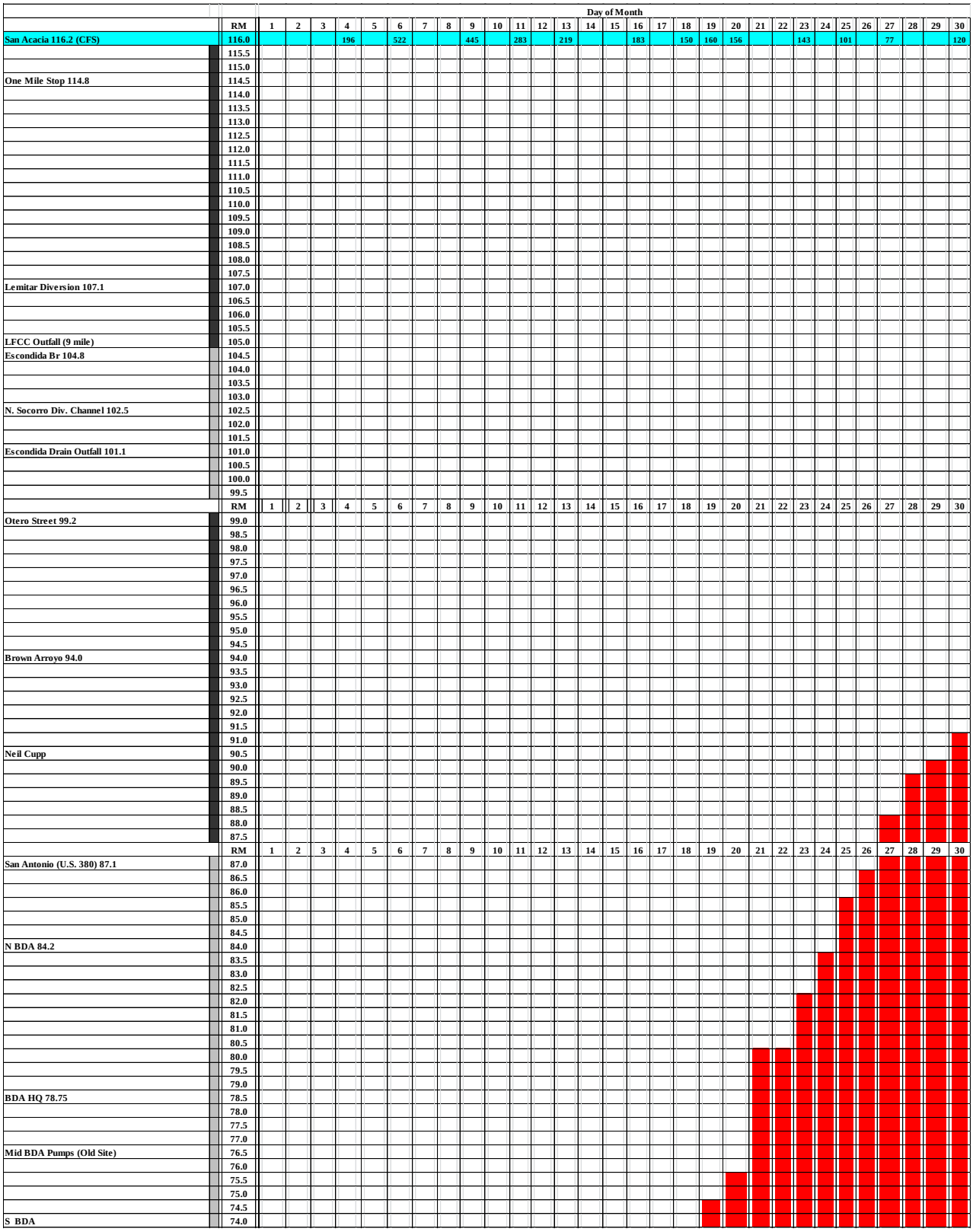
S BDA	74.0																															

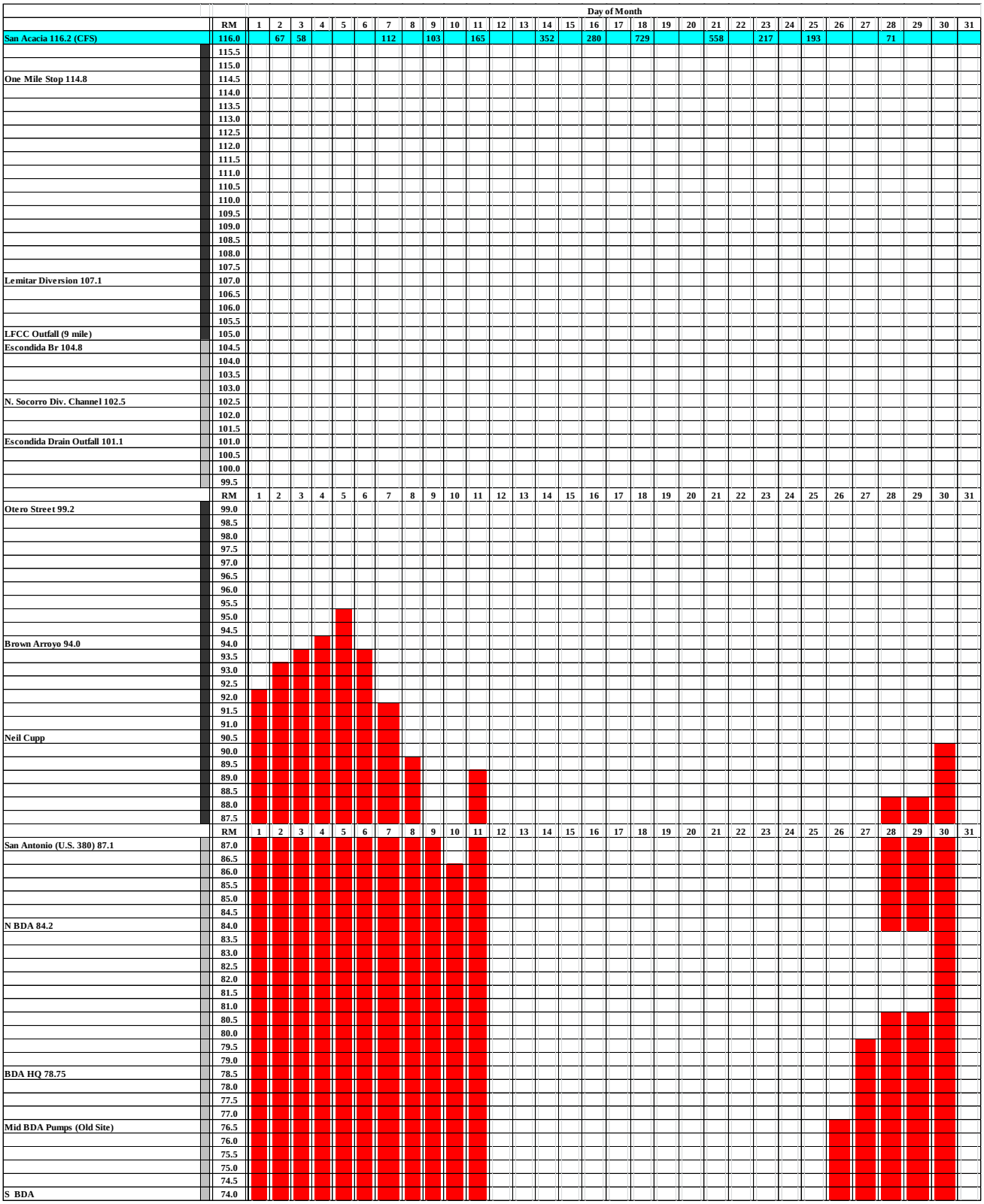
Note: Cells shaded "red" indicate river drying on a given date and at a given half-mile river segment. Numbers in the blue-colored row are instantaneous estimates of flow at a given flow at the indicated gauge site as reported by the U.S. Army Corps of Engineers during morning water operations conference calls.

June 2014 – San Acacia Reach



Note: Cells shaded "red" indicate river drying on a given date and at a given half-mile river segment. Numbers in the blue-colored row are instantaneous estimates of flow at a given flow at the indicated gauge site as reported by the U.S. Army Corps of Engineers during morning water operations conference calls.

July 2014 – San Acacia Reach



Note: Cells shaded "red" indicate river drying on a given date and at a given half-mile river segment. Numbers in the blue-colored row are instantaneous estimates of flow at a given flow at the indicated gauge site as reported by the U.S. Army Corps of Engineers during morning water operations conference calls.

August 2014 – San Acacia Reach

		Day of Month																												
	RM	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
San Acacia 116.2 (CFS)	116.0	283					570		601			499		746		476			510		340		153			190		107		94		
	115.5																															
	115.0																															
One Mile Stop 114.8	114.5																															
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Lemitar Diversion 107.1	107.0																															
	106.5																															
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	105.5																															
LFCC Outfall (9 mile)	105.0																															
Escondida Br 104.8	104.5																															
	104.0																															
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N. Socorro Div. Channel 102.5	102.5																															
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Escondida Drain Outfall 101.1	101.0																															
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	RM	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
Otero Street 99.2	99.0																															
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	87.5																															
	RM	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
San Antonio (U.S. 380) 87.1	87.0																															
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S BDA	74.0																															

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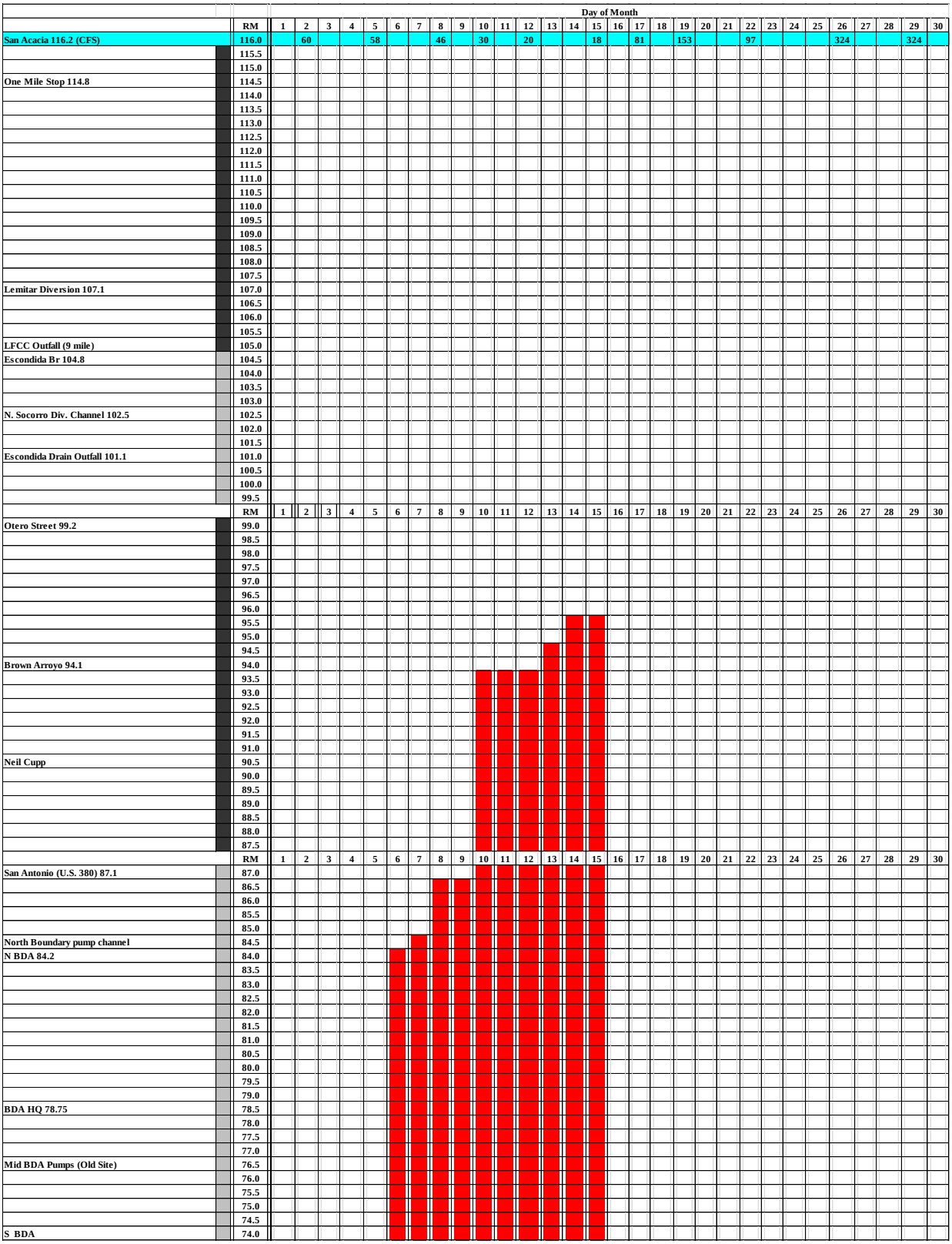
September 2014 – San Acacia Reach



Note: Cells shaded "red" indicate river drying on a given date and at a given half-mile river segment. Numbers in the blue-colored row are instantaneous estimates of flow at a given flow at the indicated gauge site as reported by the U.S. Army Corps of Engineers during morning water operations conference calls.

October 2014 – San Acacia Reach

		Day of Month																												
	RM	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
San Acacia 116.2 (CFS)	116.0	283		55			55		54		54				152			74			152				101			99				230
	115.5																															
	115.0																															
One Mile Stop 114.8	114.5																															
	114.0																															
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Lemitar Diversion 107.1	107.0																															
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LFCC Outfall (9 mile)	105.0																															
Escondida Br 104.8	104.5																															
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Escondida Drain Outfall 101.1	101.0																															
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Otero Street 99.2	99.0																															
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	RM	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
San Antonio (U.S. 380) 87.1	87.0																															
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APPENDIX E.
SAFETY DOCUMENTS

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SWCA ENVIRONMENTAL CONSULTANTS

JOB HAZARD ANALYSIS FORM (JHA)

Version 9d

Project Name:	Project Manager:	Project Number:	Project Start Date:	Project Address / Lat + Long
River Eyes	Mike Hatch	026071.01	4/1/2014	Bernalillo, Valencia, Socorro counties

PM Author Name (list other contributors):	Project Field Work Description:	Project Location Directions:
Mike Hatch, Franchesca Lucero	Monitor flow conditions and document river drying	Rio Grande corridor between Albuquerque and Elephant Butte Reservoir

The JHA form must be prepared prior to the start of any field work and may be modified in writing when environmental or administrative conditions change. Crew members should identify additional hazards and notify their Field Lead and coworkers immediately as conditions change. The Project Manager has ultimate responsibility for the proper planning of field work. Per OSHA and certain state laws, the Field Supervisor has ultimate responsibility for the safe execution of field work and can be held personally responsible for negligence.

SECTION 1 PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIREMENTS

SWCA Standard PPE for Field Work

Reference: OSHA 1910, Sub-part I

Note: A decision to deviate from these standards may only be made by the Project Manager.

- **Footwear –** Ankle-protecting hiking boots are SWCA's standard. Some projects may require a deviation from this standard (i.e.: steel-toed boots, river shoes, etc.). Flip flops are never permitted.
- **Shirts/Pants –** Long-sleeved shirts and pants are standard clothing for field crews, as they provide protection from many hazards such as poison ivy/oak/sumac, lacerations/scratches, sunburns, and cold weather conditions. Sleeveless shirts are not permitted.
- **Safety Vests –** Reflective Safety Vests are required when operating around heavy equipment or roadways, or as required by clients.
- **Gloves –** Gloves must be carried by field crew members at all times, and must be worn whenever faced with the risk of cuts or lacerations, abrasions, and punctures (i.e.: vegetation, rocky terrain, operating equipment, etc.). Leather gloves are the standard; however, certain conditions may arise that require specialized gloves (i.e.: chemical-proof, heat resistant, cold weather, etc.).
- **Eye Protection –** Must be worn in areas where vegetation or other hazards are at or above eye-level. Protective eyewear must be carried at all times in case such conditions should arise unexpectedly.
- **Hearing Protection -** Should be used when working near loud equipment and must be able to reduce the sound to 85 db or less.
- **Head Protection -** Baseball hat or head covering providing shade should be worn for general outdoor warm-weather work open in areas that have minimal risk of head injury. Winter hats designed to retain heat should be worn when working in cold weather. ANSI-approved (Z-89.1) hard hats must always be worn when working near heavy equipment or when head-strike hazards are present (or if required by the client/contract). DOT-approved (49CFR571.218) helmet must be worn when operating ATVs. Climbing helmets must be worn according to SWCA's 'Slope Guide' reference card.

PM PPE Assessment	Required?	Recommended?
Hard Hat	☐	☐
Sun Protection	☑	☐
Safety Glasses	☑	☐
Ear Protection	☐	☑
Dust Mask (3M)	☐	☑
Long-Sleeved Shirts	☑	☐
Over-Ankle Hiking Boots	☑	☐
Steel-Toe Boots	☐	☐
Gloves	☑	☐
Snake Gators	☑	☐
Fire-Resistant Clothing (FRC)	☐	☐

Special Project-Specific PPE Requirements or Exceptions to SWCA Standards

SECTION 2 HAZARD CONTROLS					
Category	**Hazard Description**	**Hazard Controls**	**Probability**	**Severity**	**Overall Risk**
General - First Aid	Unprepared, Injury, Communication	At least one member of each field crew should have taken First Aid training. All field crews should carry a fully stocked field first aid kit (email safety@swca.com for a list of kits and supplies).	2	B	2B
General - Storm Conditions (lightning, electrocution, flash floods, tornadoes)	Electrical shock (direct / indirect), Drowning, Impalement, Hypothermia	• Lightning–Employees should seek shelter in their vehicle if possible. Incorporate the 30/30 Rule: 1. if the "Flash-To-Bang" delay (i.e.: length of time in seconds between a lightning flash and its subsequent thunder), is 30 seconds or less. 2. Remain in vehicle until 30 minutes after the final clap of thunder. If caught out in the open during a thunderstorm, crouch down and touch as little surface of the ground as possible on the lower part of a slope. Avoid standing by tall objects or under overhangs. Remove metal jewelry. If in a vehicle, avoid touching metal. • High Winds/Tornado Seek Shelter Underground storm shelter preferred, stay clear of windows and exterior doors, protect head, face, and neck with arms. • Floods–Be familiar with the land features and aware of weather in your area and upstream of your area, as a flash flood may occur many miles downstream of a storm (even if no rain is falling in your vicinity). Park your vehicle on high ground to avoid loss. Be aware of washes that you may cross, as they may separate you from your vehicle; do not attempt to cross rushing water to return to your vehicle—when in doubt, seek higher ground and wait. Don't try to outrace a flood on foot. When walking through a stream, or crossing a stream on rocks or logs, loosen pack buckles so if you fall you can easily get away from your pack and it will not drag you under.	1	A	1A
General - Heavy Equipment	Crushing Hazard, Severe laceration, Loss of limb, Death, Eye injury, Hearing loss (STS)	Always wear appropriate PPE (i.e.: reflective vest, hard hat, steel toe boots, etc.). Always maintain line of site with the equipment operator–never position yourself in a blind spot. When in doubt, move safely out of range of equipment and regain line of site. Never position yourself between yourself and a fixed object to avoid being crushed. Avoid equipment pinch points where they articulate. Avoid performing activities in times of low illumination, but if absolutely necessary, use flashlights.	1	A	1A
General - Dangerous or Violent Individuals	Personal injury / Mental stress	Be conscious of potentially dangerous or violent individuals or groups. Do not confront or approach dangerous individuals. If you feel threatened, call 911 and contact your Project Manager/Office Director immediately (management should inform local law enforcement once employees are safely out of the field). To avoid possible landowner confrontational issues, ensure that the landowner has been notified in a timely fashion and that their acknowledgment of such notification is formally documented (i.e.: who made the notification, when, and what the response was). The Client or whoever did the notification must confirm that such actions have been taken by email, etc. If situation allows attempt a courtesy notification to further ensure no misunderstandings. Should one occur, do not argue; rather, politely withdraw and notify client. As a last resort, consider carrying pepper spray, and know how to use it. SWCA does not as a general rule provide pepper spray to employees. If an employee chooses to carry pepper spray on their own free will, they must thoroughly read the instructions and report to their supervisor that they intend to carry such a device, and be able demonstrate knowledge on its proper use (without discharging it). A Principal or Office Director may choose to provide pepper spray to employees, but by doing so they must provide formal training on its proper use before allowing an employee to carry it (insert link to video), and a training acknowledgement form must be submitted to safetytraining@swca.com upon successful completion.	1	C	1C
General - Working in Unfamiliar Areas (getting lost)	Disorientation, Various other hazards	Employees should be aware of surroundings and should inform others of their destination for the day. Always carry a map, compass, matches/lighter, more water than you need for the day, and signaling device (mirror, air horn, and whistle). Before leaving your vehicle, mark a waypoint on your handheld GPS so you can find your way back at the end of the day. If you have no cell phone coverage, do not panic. Before moving, trace your thoughts back to the last point where you definitely knew your location, how long ago that was and in what general direction you traveled since then. Retrace your original path before you got lost. If no success – create a physical or a sound signal. Insulate yourself and wait for help to arrive.	1	D	1D
General - Seasonal Allergies	Rash, Difficulty breathing, Vomiting, Cramps, and Eye irritation	Be aware of pollen count in survey area. Use preventative medicine such as antihistamines to reduce hazard of environmental pollen (as always, check with your doctor before taking any medication). If your doctor advises you to carry an EpiPen due to a potentially severe allergic reaction, make sure those around you know how to assist you and where the EpiPen is located.	1	D	1D
General - Heat Stress	Heat Exhaustion, Heat Stroke, Dehydration, Sunburn, Long term health risks (Cancer)	Heat exhaustion is caused by the loss of large amounts of fluid by sweating, sometimes with excessive loss of salt. A worker suffering from heat exhaustion still sweats but experiences extreme weakness or fatigue, giddiness, nausea, or headache. In more serious cases, the victim may vomit or lose consciousness. The skin is clammy and moist, the complexion is pale or flushed, and the body temperature is normal or only slightly elevated. In most cases a treatment involves having the victim rest in a cool place and drink plenty of liquids. Victims with mild cases of heat exhaustion usually recover spontaneously with this treatment. Those with severe cases may require extended care for several days. There are no known permanent effects. Wear sunscreen, hat, and sunglasses to help avoid heat stress.	2	C	2C

General - Dehydration	Dehydration	Workers should drink 5 to 7 ounces of fluids every 15 to 20 minutes (1 gallon per person per day) to replenish the necessary fluids in the body. Include both water and electrolytes as needed. Signs of dehydration include thirst, lack of urination and concentrated color, dry mouth, lack of tears, no sweating, muscle cramps, and nausea and vomiting. Fluid replacements may be attempted by drinking frequent, small amounts of clear fluids.	1	C	1C
General - Hypothermia	Hypothermia	Hypothermia usually occurs gradually. Often, people are not aware that they need help, much less medical attention. Common signs to look for are shivering, which is your body's attempt to generate heat through muscle activity, and the "-umbles": stumbles, mumbles, fumbles, and grumbles. These behaviors may be a result of changes in consciousness and motor coordination caused by hypothermia. Other hypothermia symptoms may include slurred speech, abnormally slow rate of breathing, cold, pale skin, fatigue, lethargy, or apathy. The severity of hypothermia can vary, depending on how low your core body temperature drops. Severe hypothermia eventually leads to cardiac and respiratory failure, then death. Wear layers, and bring extra clothes. Keep head covered. Use hand/foot warmers as necessary.	1	C	1C
General - Hiking & Working Remotely	Communication hazards, Head/Neck injuries, Various other hazards	Let others know the general location of your field work. Carry tools in hand, facing downslope, so they can easily be discarded. Wear boots with non-skid soles. Make sure your footing is secure. Test each step. Be careful going downhill, especially after a long day. Try to keep one hand free while traversing up or down steep slopes. Wear appropriate footwear and clothing to ensure protection. If you fall, roll with the fall. Establish secure footing before taking the next step. Start a regimen of whole body stretching to improve muscle tone and flexibility. Know your weak spot (i.e.: recurring wrist or ankle pain, a shoulder that's often sore or a "bad" back indicate areas at risk). Be sure to warm up (20 jumping jacks) and stretch muscles before engaging in rigorous activity—avoid stretching or straining cold muscles. For guidance on stretching exercises, refer to the guideline MySWCA, or the reference card.	2	B	2B
General - Blisters	Blisters, Infection, Fatigue	Break in boots before field work. Do not remove or rub off the top of the blister. Before your blister grows and ruptures, apply a blister bandage. This will pass the friction to the bandage rather than your skin. The most important part is to do this before the blister gets unbearable. If the blister ruptures, apply antibiotic ointment, but avoid alcohol or iodine. Change the gauze or bandage daily.	1	D	1D
General - Steep Inclines/Declines (rock outcrops, cliffs, downed trees & steep drainages)	Slips, Trips, Falls, Head / Neck injuries, Cuts, Bruises, Broken bones	Travel on the contour; do not attempt to scale or descend rock outcrops. Consider all rock outcrops unstable, and do not depend on them to support your weight. Test every step to uncover loose rocks, unstable soil, or slick surfaces, as they may be slippery. Downed trees are often extremely slippery or unstable and it is best to avoid stepping on or straddling them. Grasp rooted brush to avoid uncontrolled slides.	5	C	5C
General - Surveying (cutbanks and cliffs)	Slips, Trips, Falls, Head / Neck injuries, Cuts, Bruises, Broken bones, Cave-ins	Be mindful of cutbanks and friable soils. Even if a bank looks stable, it may be seriously undercut and additional pressure could cause mass cleavage and a slide/fall of the bank. Vehicles should remain at least 25 feet from cutbank edge, and persons walking should remain several feet away from areas where mass wasting or other erosion factors are observable.	2	C	2C
Vehicle - Automobile	Minor to severe personal injury, Multiple person injury, Fatality, Fire, Fatigue, Civil and criminal hazards	• Complete SWCA Daily Vehicle Inspection Log. Address any delinquent issues identified during inspection. Wear seatbelts. Drive defensively. Use lights & flashers when appropriate. While driving in rough terrain, stop vehicle, walk ahead of the vehicle for a short distance to identify hazards and look for areas to turn around, etc. Secure all loose objects in the passenger area or store in a separate storage area. Know the symptoms of fatigue. Take frequent breaks when driving long distances. Do not drive more than three hours without a break. • Park vehicles in locations that do not impede traffic flow. Back vehicles into parking slots when possible. Use spotter when the view of the parking area is obstructed. Do not breach berms or otherwise restricted roads. Do not park in arroyos or other areas prone to flash flooding when storms are likely. Follow the guidelines of "Tread Lightly." • Vehicles traveling on unimproved roads may accumulate excessive amounts of dry vegetation on the undercarriage, resulting in potential fire danger. To prevent this, field personnel will visually inspect the undercarriage of parked vehicles and remove vegetation when necessary. Field vehicles will also be parked in areas with sufficient vegetation clearance to prevent vehicle fires.	1	C	1C
Vehicle - All Terrain Vehicle (ATV)	Minor to severe personal injury, Multiple person injury, Fatality, Fire, Fatigue, Civil and criminal hazards	Prior to riding, all employees must complete SWCA's ATV training located on MySWCA. Complete SWCA Daily ATV Inspection Log. Wear proper PPE (a helmet is required). Do NOT carry passengers unless the ATV is designed to do so. Use extra caution if road or environmental conditions change. Be aware of your surroundings. Give special attention to terrain features such as roads, slopes, canals, ditches, blind intersections, trees, shrubs, other vehicles. Don't traverse a hill sideways, always climb straight up or straight down. If you are in a situation where you need to cross pitched terrain (having a distinct change in camber from one side of the vehicle to the other), always lean towards the upslope direction to avoid rollovers. If you're not sure of the trail conditions, be prepared for the worst and consider walking, if feasible. To avoid damage to the truck wall in front of truck bed and rear window, place a barrier of some sort such as 2-4 old rubber tires that can absorb the impact of the ATV if it goes too far in loading or shifts in transport. Never push ATV up a ramp alone. Consider installing a winch or carrying a come-a-long with added recovery straps. Drive up ramps carefully wearing all PPE necessary (i.e.: helmets and gloves, etc.).	5	C	5C

Equipment - Carrying Field Equipment	Slips, Trips, Sprains, Strain, Cuts, Scratches, Back injury, Heat Exhaustion/Stroke, Fatigue	Employees shall not carry objects greater than 40lbs. (or any other weight that could result in injury) or greater than 6 feet without the aid of a mechanical device or the assistance of another employee. Watch for uneven surfaces or objects on the ground. Wear gloves where potential pinch points occur or where objects are able to cut you. Use any other applicable Personal Protective Equipment (PPE) as needed.	1	D	1D
Equipment - Loading Equipment (on/off vehicles)	Slips, Trips, Sprains, Strain, Cuts, Scratches, Back injury, Fatigue, Crushing hazard	Employees will secure all loads in or on vehicles using ropes, tie-downs, tarps, bungee cords, or other appropriate securing materials to keep load/equipment from shifting or falling.	3	C	3C
Site Condition - Traversing Slopes	Slips, Trips and Falls causing sprains; Broken bones and concussions; Loose falling racks causing head trauma	Traversing steep slopes can be hazardous and cause premature fatigue. It is important to always assess steep slopes for safety. Alternate routes should be taken when possible. Consider: length of hike, number of difficult pitches (slope changes), difficulty of hardest pitch, average pitch difficulty, commitment level to finish hike (point of no return), ascent and descent time, terrain (i.e.: mud, scree, talus, grassland, thick vegetation). Review topographical maps: Avoid steep descents/inclines. Wear hiking boots that support and protect your ankles and feet. Consider hiking poles for footing stability and stability of the path ahead. Keep poles pointed away and to the sides of your body. Slow your pace, keep your steps short, and your weight over your feet. Stay focused on foot placement. Steep slopes: use a "side-wide" gait; stepping slightly to the side, whether up or down, helps balance and prevents knee stress. After the first step, step wide to the opposite side; feels natural as you distribute your weight into a wide stance. In descent, keep your knees slightly bent and your center of gravity low. On descent, if hands are needed for balance, face the slope. Zigzag or switchback when possible to reduce strain and fatigue; also reduces your partner from hiking in your “rock shadow”, the area below in the path of rolling/falling rocks. Watch ahead and avoid wet or icy obstacles such as rocks, trees and mud. Think ahead what you'll do if you start to slide - prepare for it. If falling, do not try to "catch" yourself; try to avoid landing on your hands, elbows or knees. Landing on the side of your body is much safer. *Scree* is a loose slope of small rock fragments; *talus* is rock fragments large enough to step on individually. Fatigue slows your awareness and preparedness to hike safely; slopes will decrease your distance output and efficiency after a 15% grade incline. Use the Yosemite Decimal System (YDS) to assess slope class and plan routes. *Grade* is represented by percentage (%) and *Slope* is represented in degrees (°).	1	B	**1B**
Site Condition - Crossing Water (arroyos, flash floods, rivers and streams)	Drowning, Hypothermia, Trip hazard, Vehicle / Equipment loss	If thunderstorms and / or heavy rain occur, move immediately to higher ground and do NOT cross any arroyos or small streams. Be aware of storms in the mountains that may result in flash flooding in locations some distance from the storm center. Do not cross fast flowing water. Find a wrist thick shoulder height stick to test the water depth in front of you; this can also be used as support, enabling you to keep two points of contact with the river bottom at all times. Loosen your pack so you can get it off quickly if you fall. Face slightly upstream on an angle and sidestep—do not cross your legs. If you are in a group, hold onto each other and cross in a “conga line,” angling upstream, with the weaker hikers in the middle. For fast/moderately fast flowing water, cross if less than just above the knee-deep and you can see/feel the bottom (use a stick). For slow flowing water, cross if less than waist deep; do not cross unless necessary. If water is impassable. find a shallow spot to cross, if you can’t find a safe place and your life does not depend on you crossing, turn around and go back.	5	D	5D
Site Condition - Wet Soil	Trip hazard, Hypothermia, Cultural integrity compromise	Some soils are extremely hydric and, if saturated, can create conditions where off-road vehicles can become stuck – even with a small amount of precipitation. Driving in conditions like these can cause deep rutting in roads and may damage vegetation, leading to erosion or loss of habitat. Driving should be avoided in these conditions; however, walking in these conditions can also provide similar difficulties. Any work on or near cultural resource sites can leave deep footprints and may affect site features or integrity. In very wet conditions, fieldwork should be suspended for a day or more to avoid affecting cultural resource sites.	5	D	5D
Site Condition - Barbed Wire Fence	Electric Shock, Cut / Puncture / Laceration hazard, Trip hazard	Choose safe crossing points and techniques. Team members should always assist each other. Be sure to wear appropriate leather gloves when handling barbed wire. Wear appropriate clothing to protect against punctures, cuts, and lacerations by wire or post. When possible, as a first option, employees should crawl under barbed wire fences if spacing allows. Use caution when crossing fence for trip hazards. Cautiously use boot to apply weight to fence to determine if it is strong enough to support weight before climbing over it. Ensure the posts are not in a position to impale or cause harm while crossing. Always wear gloves when handling a fence. Keep tetanus shots current in case of laceration.	1	B	**1B**

Site Condition - Burned Forest Areas	Falling objects (trees & branches), Trip hazards (large holes)	Be aware of the dangers of burned trees, which are now in danger of falling over and hitting/pinning you. If it's windy out, the likelihood of a tree falling over is increased. Be aware of hidden holes in the ash – areas where tree trunks used to be, but have burned out and left a hole in the ground. The ash and sediment covers these holes loosely, so they appear to be solid ground when it is actually a large hole. Since such hazards are hard to detect, be extra cautious when walking around burn areas and use a walking stick to probe the ground ahead.	2	C	**2C**
Site Condition - Natural Gas Pipelines	Explosion, Fire, Asphyxiation	Signs of a gas leak include: a gas or petroleum odor, a hissing sound, or blowing dirt, grass or leaves near a pipeline. If you suspect a gas leak, turn off and abandon any motorized equipment. Immediately leave the area on foot in an upwind direction. Warn others to stay away. Call 911 or the local fire or police department. DO NOT smoke around pipelines.	1	C	**1C**
Site Condition - Jetty Jacks & Tie-Back Lines	Cut / Puncture / Laceration hazard, Trip hazard	Choose safe crossing points and access points. Jetty jacks and tie-backs could be submerged in water and ground. Locate or identify jetty jacks and associated lines before wading into river or walking through dense vegetation and brush. Be prepared to wear appropriate gloves, pants, and boots when working near jetty jacks to avoid cuts and lacerations. Use caution when crossing jetty jacks and tie-backs as they are a tripping hazard.	5	C	**5C**
Site Condition - Dense Vegetation (scratches from brush and trees)	Scratches, Eye trauma, Ear trauma	Be aware of potential hazards. Wear appropriate clothing to protect the skin. When moving through dense woody vegetation, always wear long sleeved shirt, long pants, closed toe shoes, safety glasses and gloves. Carry personal first aid kits. Recognize hazardous vegetation and avoid contact.	5	C	**5C**
Site Condition - Toxic Plants (Poison Ivy or Poison Oak)	Scratches, Eye trauma, Ear trauma, Toxic / Poisonous / Irritant plants	Carry personal first aid kits containing Calamine lotion. Recognize hazardous vegetation and avoid contact. Apply Ivy Block to exposed skin repeatedly while in infested area. Dispose of covers/gloves safely. Decontaminate entire body. Apply Tecnu cream for two minutes then wash off with copious amounts of water. BE AWARE: toxins may have transferred to clothing, backpacks, vehicle interiors and hotel rooms. Be sure to use caution when handling potentially exposed clothing, tools and equipment.	1	C	**1C**
Animal - Insect Bites & Stings	Irritation, Bite / Sting, Infection, Allergic reaction, Disease	• DEET can be applied to either exposed skin or clothing. It should not be applied to skin that is covered by clothes. Do not apply insect repellent over cuts, wounds, or inflamed or eczematous skin. Under most circumstances of casual use, 10% - 35% DEET will provide adequate protection. In conditions where there is a rapid loss of repellent from the skin due to wash off from rain, perspiration, or high ambient temperatures, periodic reapplication is suggested. Use a bug net that covers exposed skin. If bitten, use antihistamines to control symptoms. • If your doctor advises you to carry an EpiPen due to a potentially severe allergic reaction, make sure those around you know how to assist you and where the EpiPen is located. The sting of these insects is caused by the insects utilizing self defense or defense of the nest response, so avoid all nests when possible. If a bee stings you, remove the stinger by scraping away the stinger sideways along the sting using a needle or credit card (do not squeeze with tweezers, it will cause more venom to come out)	3	D	**3D**
Animal - Tick Bite	Irritation, Infection, Disease	Frequently check for ticks—if you can catch them within 24 hours there is 0% chance of contracting Lyme Disease. Use fine tweezers to grasp the tick as close to the skin surface as possible. Pull backwards gently but firmly, using an even, steady pressure. Do not jerk or twist. Do not squeeze, crush, or puncture the body of the tick, since its bodily fluids may contain infection causing organisms. After removing the tick, wash the skin and hands thoroughly with soap and water. If any mouth parts of the tick remain in the skin, these should be left alone; they will be expelled on their own. Attempts to remove these parts may result in significant skin trauma. Seek medical attention should the bite become infected.	1	D	**1D**
Animal - Snake Bite	Puncture wound, Toxin exposure, Infection, Allergic reaction, Loss of limb, Death	When moving through tall grass or weeds poke at the ground in front of you with a long stick to scare away snakes. Watch where you step and where you sit when outdoors. Wear loose, long pants and gaiters. If gaiters are not available, then calf high, thick leather or rubber boots should be worn. Shine a flashlight on your path when walking outside at night. Never handle a snake, even if you think it is dead. If bitten, take off any jewelry or tight clothing near the bite quickly, before swelling starts. Clean the bite wound with antiseptic wipes or soap and water. Be sure to wipe in the direction away from the wound. If you think the bite was from a poisonous snake, get to a hospital as soon as you can. If medical help is more than 30 minutes away, tie an elastic wrap two inches above the bite to slow circulation to the area; overly tight tourniquets should never be used as these can block arterial blood flow to the affected area and worsen tissue damage. The wrap should be loose enough to slip a finger underneath it. Do NOT bleed the wound. Do NOT try to suck the venom out of the wound. Do NOT put ice on the bite.	1	A	**1A**
Animal - Bear Encounter	Laceration, Severe head & body trauma, Death	Black bears: Never make eye contact. Make yourself look large, raise arms, make noise, and leave area slowly without turning your back. Never play dead, and fight back if attacked. Carry specialized "bear mace" pepper spray and know how to properly use it.** Grizzly bears: Never make eye contact. Make yourself look large, make noise, and leave area slowly without turning your back. If attacked, curl into fetal position and protect head and neck. Do not fight back.	1	B	**1B**

Animal - Bear Spray Usage	Laceration, Severe head & body trauma, Death	The best defense is to not get within ¼ mile of bears, if possible. If a bear confrontation is possible (or probable) and bear spray is to be used observe the following guidelines: 1. Use bear spray only. Other pepper sprays will be ineffective. 2. Be sure spray has not expired and is at least in a 7.9 oz. can. 3. If possible have a backup canister available but in either case the spray canisters have to be readily accessible (on your person) as you may only have seconds to react. 4. Be sure to disengage safety mechanism. 5. Begin to spray charging bear at a minimum of 25 feet—any further and spray will be less effective, any closer will reduce the time that the spray will take to effect the bear. 6. Spray for at least 6 seconds. 7. Spray downwind, if you have the option. 8. Aim at face, particularly the eyes and nose, unless it is of the Fog type spray in which case aim lower and to the front of the bear to allow the fog to billow up. 9. After initial bursts, back away while releasing a few period bursts of spray to cover your withdrawal.	1	A	**1A**
Animal - Mountain Lion	Laceration, Severe head & body trauma, Death	Avoid working when mountain lions are most active—dawn, dusk, and at night. Do not approach a mountain lion. If you encounter a mountain lion, do not run; instead, face the animal, make noise and try to look bigger by waving your arms; throw rocks or other objects. If attacked, fight back. If you witness a mountain lion attacking someone, immediately call 911.	1	A	**1A**
Animal - Endangered Species	Citation	With fieldwork, you must avoid nesting locations. Coordination must be made with appropriate governing agencies to be compliant while surveying.	5	C	**5C**
Animal - Stray / Wild Dog	Laceration, Severe head & body trauma, Disease	Stay away from dogs. Do not run if confronted, back away slowly using a calm, low voice, and remain calm. Carry pepper spray and have it readily accessible. Look for a defense weapon. Carry and know how to properly use pepper spray. SWCA does not as a general rule provide pepper spray to employees. If an employee chooses to carry pepper spray on their own free will, they must thoroughly read the instructions and report to their supervisor that they intend to carry such a device, and be able demonstrate knowledge on its proper use (without discharging it). A Principal or Office Director may choose to provide pepper spray to employees, but by doing so they must provide formal training on its proper use before allowing an employee to carry it (insert link to video), and a training acknowledgement form must be submitted to safetytraining@swca.com upon successful completion.	5	B	**5B**
Animal - Horse & Livestock	Blunt force trauma, Paralysis, Fall hazards, Goring / Lacerations	Whenever possible, ask landowner to confine horses / livestock outside of the project area. Stay a safe distance away from animals. Avoid calves and separating them from their mothers. Avoid isolating one animal from the group. Never trust a bull.	1	C	**1C**
Special - Chainsaw	Severe laceration, Loss of limb, Death, Eye injury, Hearing loss (STS), Back strain	Use proper chainsaw technique. Be aware of the direction trees will fall when cut. Make sure all field crew members are outside fall zone and away from person using chainsaw. Wear appropriate chainsaw protective gear. Make sure that the chainsaw is in working order before operation. Be aware of sharp stumps and trip hazards once trees have been removed. Be aware of all chainsaw activity in the area.	5	C	**5C**
Special - Excavation (Surface)	Splinters, Blisters, Cuts, Lacerations, Back strain, Tripping hazard	Wear gloves while digging and screening matrix. Watch for broken glass and sharp metal objects on ground surface and while screening to avoid lacerations. Avoid putting unnecessary strain on back while digging and screening by maintaining proper posture and using legs to lift. Do not lift and twist simultaneously.	3	D	**3D**
Special - Roadway Work (working in the Right of Way)	Severe laceration, Loss of limb, Death, Eye injury, Visibility hazards, Crushing hazards	Utilize safety clothing, cones, and other traffic control measures. Wear hard hats and vests at all times. Park vehicle off side of road and clearly post signs and cones, if needed. Look both ways if crossing road. Do not cross in low visibility area; walk to high visibility area to cross, and double check, if necessary.	1	E	**1E**

Special - Solo Fieldwork	Communication hazards, Various other hazards	Solo Fieldwork Policy (outside of populated areas): (Non-Populated Areas) Solo fieldwork should be avoided whenever possible. Exceptions are allowed only when: • the fieldworker will have reliable cell phone (or satellite phone) coverage the entire time, • the fieldworker is either working close enough to a city or town that emergency response could arrive quickly (within say 20 min or so), or working with/near non-SWCA personnel who are capable of providing assistance if needed (e.g., monitoring a construction crew), and • the terrain, roads, work methods, environmental conditions, etc. are safe for solo fieldwork. In addition, a communication plan must be established in advance to ensure that the worker will be reasonably safe. Each office must have a detailed plan. Solo Fieldwork Policy (in populated areas): (Populated Areas) For solo fieldwork in town (populated areas where people are typically present to help or call for help in an emergency), the PM and the fieldworker must still have a process for checking in, at a minimum to confirm that the fieldworker got back to work/home safely at the end of the day.	5	D	**5D**
Site Condition – Water Hazards Cold/Frozen/Stagnant Waters	Infections, Waterborne diseases and hypothermia from overexposure to cold water and falling through ice	Stagnant Waters: Rivers, canals, drains, ditches, reservoirs, and lakes may not always have the highest water quality. Often, these waterways contain bacteria and other pathogens or pollutants. It is important for field crewmembers to have a basic understanding of the water quality within the area where they are working. Review the following information: Wash your hands often. Keep a supply of waterless antibacterial hand cleaner available. Clean hands before eating or touching the mouth in any way. Be wary of entering contaminated waters with open wounds or rashes. If you have a compromised immune system, skin sensitivities, or prior exposure to water borne illnesses, do not enter the water without protection (waders, etc.). Continuously monitor your skin and body for tell-tale signs of infection. After water work, wash all clothing thoroughly and segregated from other clothing, air out footwear, etc. Be sure to find out about possible upstream contamination hazards. Extremely cold water: Avoid entering extremely cold water. Review signs of hypothermia in the First Aid section of the manual when working in or around these conditions. Frozen bodies of water: Never go on ice without first checking the local conditions including recommended ice thickness, temperature, etc.	3	D	**3D**
IT - Lifting heavy equipment	Lifting heavy equipment	Extreme caution must be exercised when handling heavy equipment when the weight is 40 lbs. or more, or dimensions that make it awkward to handle and / or lift. Do the following: - Vehicle Transport: Rent a Pickup or SUV - Have a dolly/two-wheeler on hand (have portable dolly available for travel) - Use carts, if available - 2 people available to lifting and carrying - If possible, ship tools/equipment ahead of arrival and directly to destination	2	B	**2B**
IT - Urban/Vehicle/Criminal Hazards	Theft	Never leave equipment in plain sight in vehicle. If possible, always secure equipment in room or office rather than vehicle.	1	A	**1A**

SECTION 3 COMMUNICATIONS

Call 911 if you have a medical emergency. For medical triage, call Medcor at 1-800-775-5866. This service provides first aid advice, along with possible courses of action to take for injuries.

WORKERS COMPENSATION & EMERGENCY MEDICAL PROVIDER INFORMATION

Emergency Provider	Address	City	State & Zip	Telephone
Presbyterian Hospital	1100 Central Ave. SE	Albuquerque	NM 87106	505-841-1234

W/C Non-Emergency Provider	Address	City	State & Zip	Telephone
Concentra Urgent Care	3811 Commons Ave NE	Albuquerque	NM 87109	505-345-9599

W/C Non-Emergency Provider	Address	City	State & Zip	Telephone
Socorro General Hospital	1202 Hwy 60 West	Socorro	NM, 87801	575-835-1140

CLIENT SAFETY CONTACT

Safety Manager Name	Safety Manager Phone	Safety Manager Email	Incident Reporting Requirements
Raymond Aeyta	505-270-6552	RAbeyta@usbr.gov	Unspecified

ADDITIONAL PHONE NUMBERS

Highway Patrol	BLM/USFS Ranger	Emergency Towing Company	Police / Fire Department / Ambulance
1-888-442-6677	505-761-8700	505-864-3030	911

Poison Control	Hazardous Materials	Animal Control	Border Patrol
800-222-1222	911	505-861-1301	NA

RADIO COMMUNICATIONS

SWCA Emergency Communication Policy requires every field crew member to carry a walkie-talkie, and one member of the field crew must also carry a satellite communication device (i.e.: Delorme InReach or SPOT— typically the Field Crew Supervisor). ***Comm checks are required during the JHA daily brief (and periodically throughout the day).*** More checks may be required if the crew is on alert for incoming inclement weather, nearby wildfires, etc. Channels 8-14 can be used without an FCC License (in an emergency, you may use any frequency necessary to call for help by using the radio's 'scan' feature to find a monitored channel). Every crew member must carry extra batteries as needed.

Primary Radio Channel	Secondary Radio Channel	Monitored Emergency Channel	National Weather Service Channel
8	9		

It is the Field Supervisor's responsibility to communicate any incidents to their Supervisor and the Project Manager; as well as properly documenting and reporting incidents to the OSR at the project's office of origin and SWCA safety department. The PM must report any incidents involving injury to their Principal, and when inter-department employees are used to conduct field work, it is the PM's additional responsibility to inform the employee's home-office Principal and OSR. Employees involved in incidents should also maintain open communication with their supervisor to the degree permissible by HIPPA and OSHA.

SWCA CONTACTS

	Name	Phone	Comment
Project Manager	Mike Hatch	505-328-4419	
Field Supervisor	Greg Pargas	505-506-1517	
Principal (Office Manager)	Matt Bandy	505-552-2724	
Office Safety Representative (OSR)	Alayne Hamilton	505-206-6654	
Safety Manager	Jim Harris (available 24 hours per day for guidance)	1.855.SOS.SWCA (855.767.7922)	

SECTION 6 DAILY JHA TRACKING

Employee Acknowledgment:

- By signing and initialing this section I confirm that I have read and understand the contents of this Job Hazard Analysis (JHA) document and that I will follow this guidance. I also understand that anyone can call a Safety Timeout at any time in order to ensure a safe work environment. If I witness any unsafe situation, or when in doubt, I will STOP and make an informed decision involving the Field Supervisor and others.
- This document must be signed and initialed on the first day of field work and initialed each day thereafter while on the project. If needed, please use another sheet for additional signatures.

****** NOTE: The Field Crew Supervisor must review the following with their crew on a daily basis: 1. this JHA, and 2. the "Safety Checklist" reference card (Morning, Noon, and End of Day).***

Project Number:	026071.01	**Check One**		**Please initial for each day of the project**							
Print Name	**Signature**	Crew	Supervisor	SU	MO	TU	WE	TH	FR	SA	**Week Ending**

SWCA ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions®

DAILY SAFETY VEHICLE INSPECTION LOG

Contact your Project Office Safety Representative (OSR) for any vehicle collisions or citations while on the job

VEHICLE INFORMATION

VIN No: | WEEK ENDING:

PLATE | STATE: | OFFICE:

YEAR: | MAKE & MODEL: | COLOR:

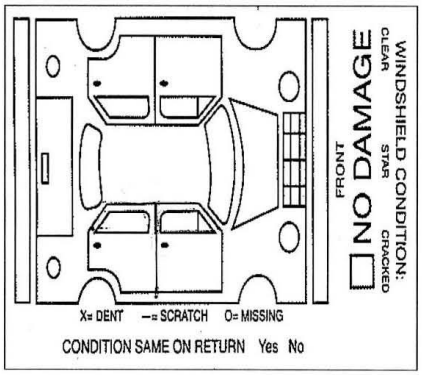
VEHICLE OWNER (√): ☐ PERSONAL ☐ SWCA ☐ RENTAL CONTRACT NUMBER:_____

VEHICLE CHECKLIST

Check appropriate item with the associated day.
Any deficiencies must be listed at the bottom of the page.

All vehicles in use shall be checked and documented at the beginning of each shift.
All defects shall be corrected before the vehicle is placed into service.

For fluid checks, see periodic checks below.	S	M	T	W	T	F	S
What is the recommended Pounds per Square Inch?	PSI =						
Are all tires inflated to the correct PSI?							
Is the tire tread in good condition for route?							
Are the tires free of gouges, blisters or defects?							
Do the high / low headlights work properly?							
Do the brake lights work properly?							
Do the reverse lights work properly?							
Do all (4) turn signal lights work properly?							
Other							
Does the horn work?							
Does the steering wheel rotate properly?							
Do the brakes & parking brake work properly?							
Do the windshield wipers work properly?							
Do you have an insurance / fleet card for the vehicle?							
Is there a copy of the current registration in the vehicle?							
Is a copy of the rental contract in the vehicle?							
Is there Vehicle Incident Reports (VIR) in the vehicle?							
Is a operators manual in the vehicle?							
Is there a emergency kit located in the vehicle?							
Is there a fire extinguisher in the vehicle (if required)?							
Is the load secure and evenly weighted?							
Are the straps or ropes in good condition?							
Is the hitch properly secure and the correct size?							
Is the trailer hitch latch secure?							
Are the Breakaway chains securely attached?							
Are the trailer lights working?							
Are electrical wires secure?							
Are the trailer tires safe?							



List date noticed and all damages, scratches, missing or non-working items.

REMINDERS:
Perform 360° vehicle walk around
Adjusted seat to appropriate position
Fasten seat belt
Adjust mirrors for a clear view

PERIODIC CHECKS:
Windshield Wiper Fluid (WEEKLY or SOONER)
Wiper Blades (WEEKLY or SOONER)
Spare Tire - Inflated and Functional (WEEKLY or SOONER)
Coolant (WEEKLY or SOONER)

PERIODIC CHECKS:
Motor Oil (WEEKLY OR EVERY 500 MILES)
Type (i.e. 10/30) _____
Transmission (ONCE A MONTH OR 2000 MILES)
Power Steering (ONCE A MONTH OR 2000 MILES)

DRIVER / MILEAGE LOG

	DRIVER - Print & Sign	Project / Task		Mileage	
SUN			/	Start	End
MON			/	Start	End
TUE			/	Start	End
WED			/	Start	End
THU			/	Start	End
FRI			/	Start	End
SAT			/	Start	End

If you are involved in an accident: provide copy of SWCA's fleet insurance card and direct other involved party's to contact us at: autoclaim@swca.com or by phone (602) 274-3831 ext. 1169. Do not discuss the accident with anyone except SWCA Management / Supervisors; Take Pictures if possible.

G:\Safety\2012 JHA & VIL_REQUEST FORM\Vehicle_Inspection_Log\Vehicle_Inspection_Log Printed 11/14/2012