

Appendix G Drainwater Volume

Technical Memorandum

To: Matt Zidar
From: L. Niel Allen
Natural Resources Consulting Engineers, Inc.

Date: September 4, 2009

Re: Summary and analysis of available water quality and flow data for Alamo and New Rivers and for drains within the IID Project area.

IID drain flows and salinity levels were estimated to evaluate water supply augmentation options using reclaimed drain water. For the analysis, flow data were acquired from the USGS for the Alamo and New Rivers and additional flow data were obtained from IID's Water Information System (WIS) for the Alamo and New Rivers and for agricultural drains. These data are summarized below and also in Table 1. Data were associated using a Geographical Information System (GIS) database to produce a map that shows WIS flow monitoring sites and metered and unmetered drains. This was done to indicate the distribution of drain water accretion and salt contributions to the New and Alamo Rivers by river reaches defined by drains. This provided the basis to estimate river flow and salt concentration at points that may be considered demand nodes for geothermal or other developments.

Data for Rivers

Alamo River

USGS Data

- Alamo River near Niland, Ca. Various intermittent water quality constituents and flow data for period of record of 1963-2007.
- No data for Alamo River near international border.

IID WIS Data

- Flow data includes "In" and "Out"; i.e., measured near the International Border and before entering the Salton Sea. Period of record of 1997-2009. Later WIS record for Alamo River Out site is USGS data.

New River

USGS Data

- New River near International Border. Various intermittent water quality constituents and flow data for period of record of 1961-2007.
- New River, near Westmoreland, Ca. Various intermittent water quality constituents and flow data for period of record of 1963-1992.

IID WIS Data

- Flow data for New River "In" and "Out"; i.e., near International Border and before entering Salton Sea. Period of record of 1997-2009. Later WIS record for New River In and New River Out is USGS data.

Table 1. Alamo and New River Data Summary

| | Period of Record | Average Flow (cfs) | Average Electrical Conductivity ($\mu\text{S}/\text{cm}$) |
|----------------------------|-----------------------------|--------------------|---|
| Source IID: | | | |
| Alamo River In | 1997-2009 | 1.3 | No Data |
| Alamo River Out | 1997-2009 | 877 | No Data |
| Source USGS: | | | |
| Alamo River (Intl. border) | No Data | No Data | No Data |
| Alamo River (near Niland) | 1963-2007 (intermittent) | 832 | 3,816 |
| Source IID: | | | |
| New River In | 1997-2009 | 181 | No Data |
| New River Out | 1997-2009 | 618 | No Data |
| Source USGS: | | | |
| New River (Intl. border) | 1961-2007 (intermittent) | 165 | 7,186 |
| New River (Westmoreland) | 1963-1992 (intermittent) | 588 | 5,189 |

Note that USGS flow data are associated with water quality samples at the times these samples were taken and do not represent all USGS flow data for these monitoring locations. Although the period of records and density of flow measurements are not the same for USGS and WIS data, comparison of the average outflows (above) show that they are relatively consistent. Likewise, average specific conductivity for the outflows (USGS data only) for each river is expected to be consistent and also indicative of present conditions. The graphs (Figures 1-6) of the WIS river outflow data (below) show that outflows to the Salton Sea fluctuate in a stable fashion from year to year. Fluctuations in specific conductivity are expected to also be stable. Occasional jumps in flow probably correspond to rare peaks in local precipitation. The New River inflow from Mexico has recently dropped from an annual average of 151 cfs in 2003 to 119 cfs in 2008. The continuation of this trend will not have a significant impact on available water supplies for reclamation.

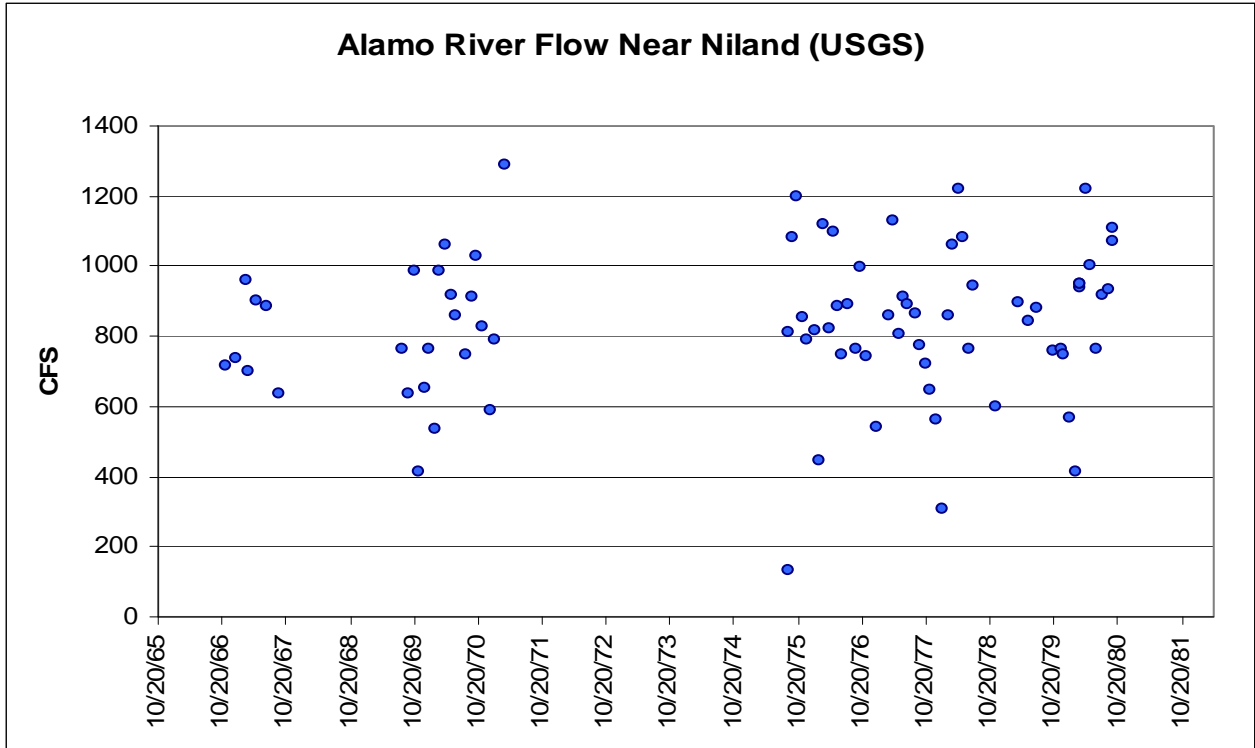


Figure 1: Daily Alamo River Flow measured near the Salton Sea from USGS.

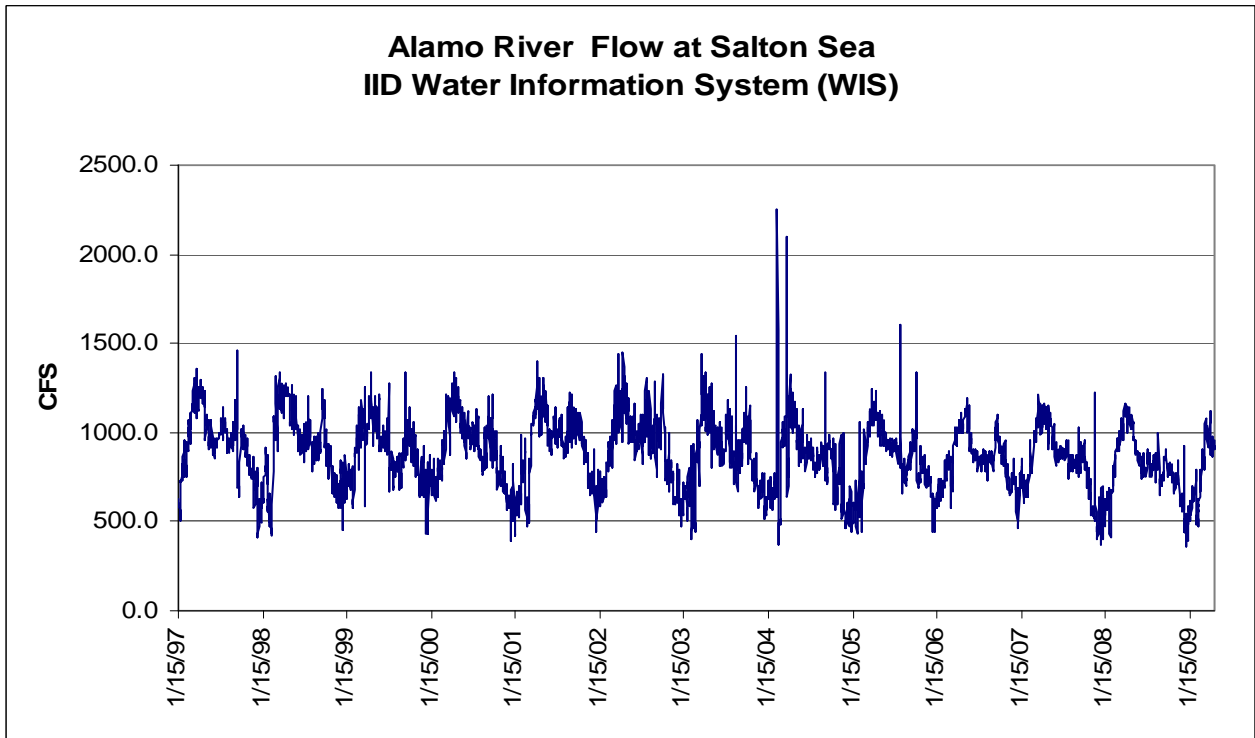


Figure 2: Daily Alamo River Flow measured near the Salton Sea from WIS.

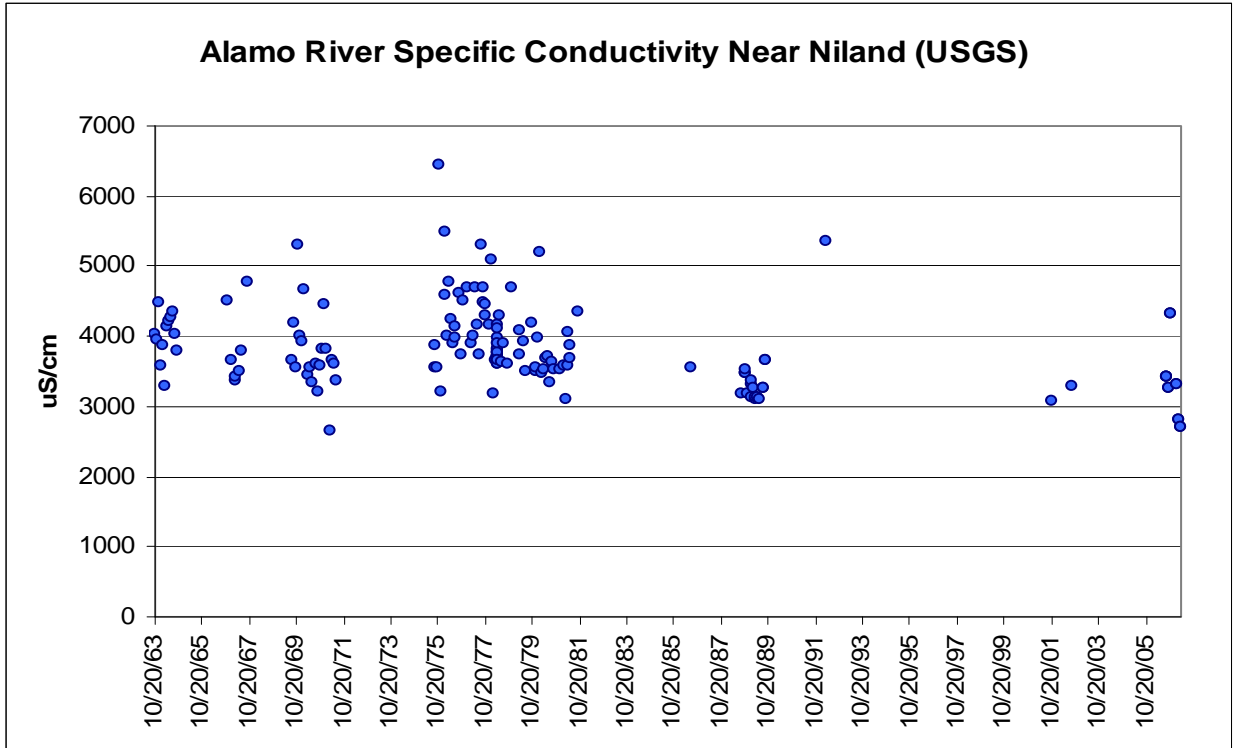


Figure 3: Daily Alamo River Specific Conductivity measured near the Salton Sea by USGS.

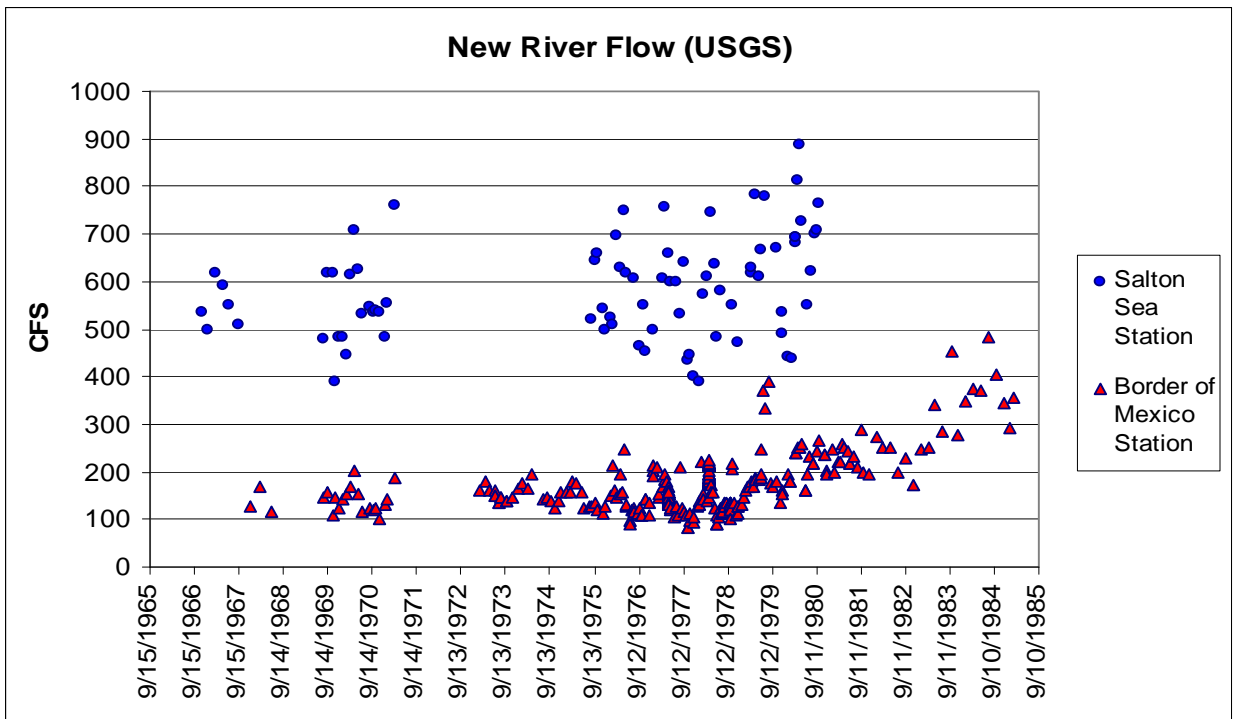


Figure 4: Daily New River Flow measured by USGS.

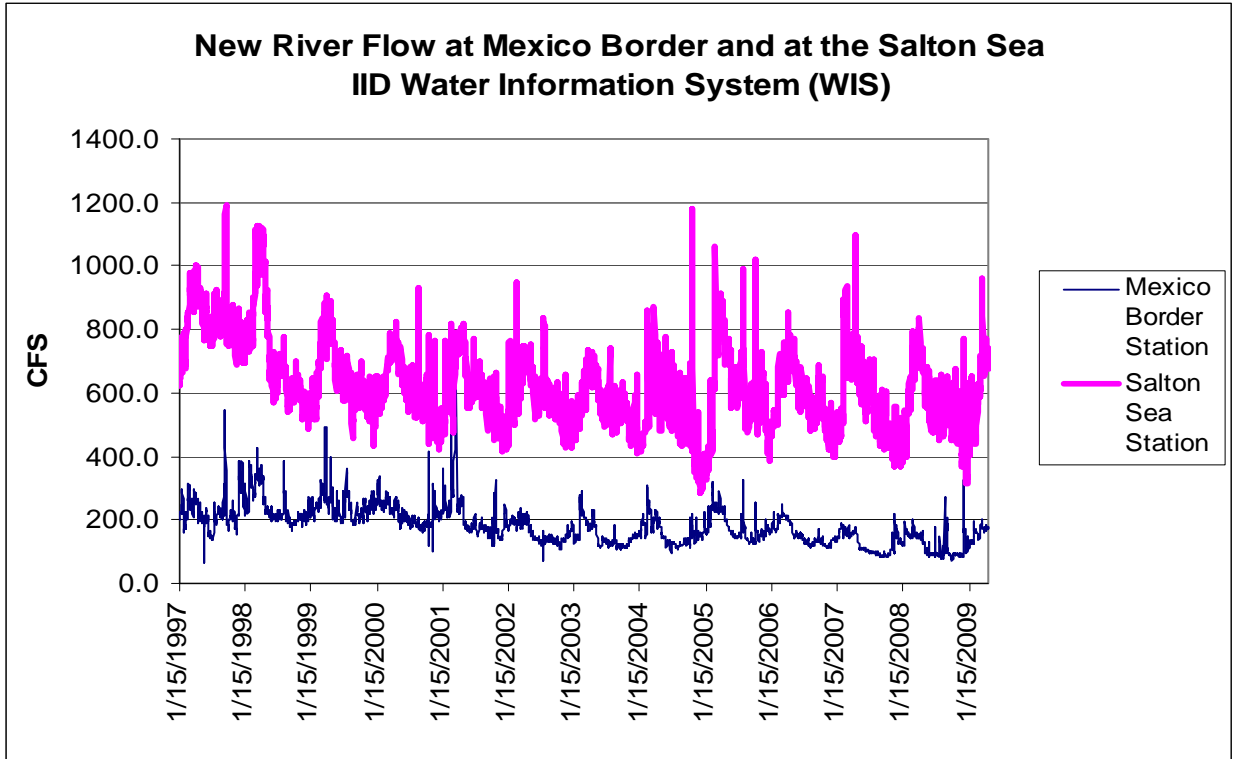


Figure 5: Daily New River Flow measured by WIS.

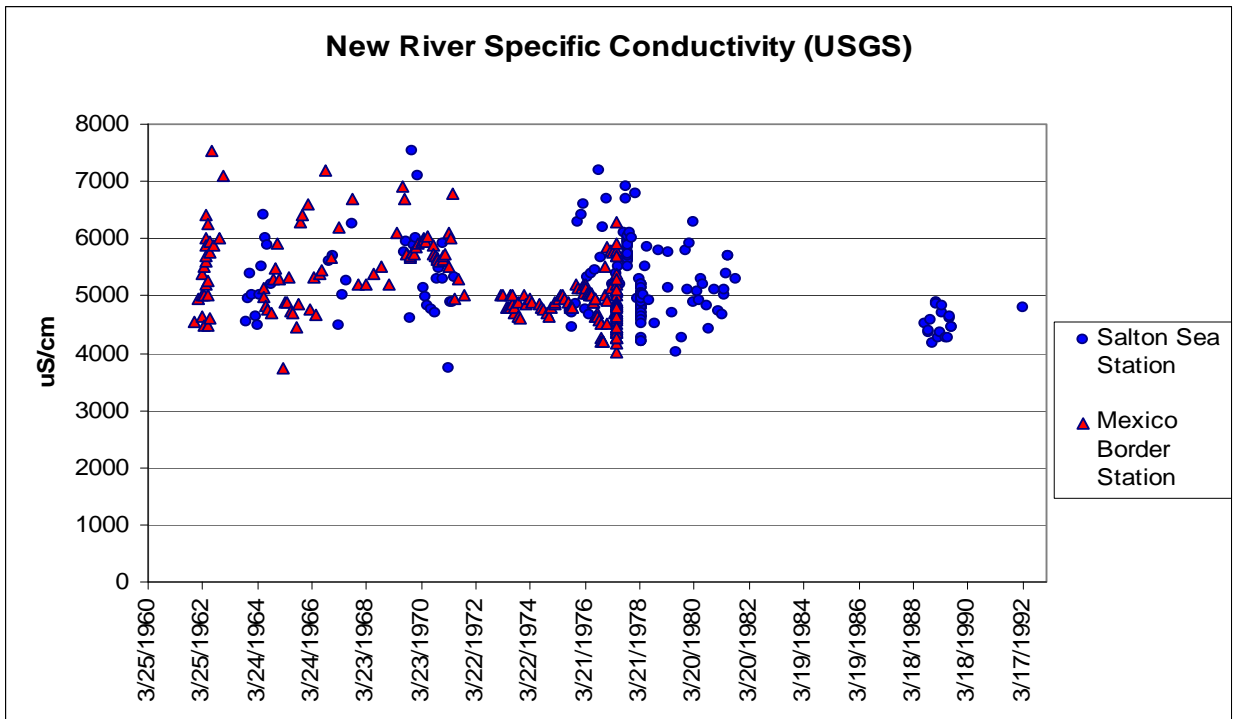


Figure 6: Daily New River Specific Conductivity Measured by USGS.

IID WIS Drain Data

WIS drain flow data, including data for the Alamo and New Rivers were acquired from IID. Locations, distances and areas associated with WIS (metered) drains and unmetered drains, within IID were plotted and mapped from a GIS database and map coverage obtained from IID.

WIS data include 43 actively metered drains within the IID system. The metered drains used in the analysis are indicated in the appendices (indicated by highlighted data in tables). A summary of IID's drains with flow data is contained in Table 2.

Table 2. Summary of IID Total Drains and Drains with Measured Flows.

| Drainage | All Drains | | | WIS Metered Drains (used in Study) | |
|-------------|---------------------|---------|---------|---------------------------------------|-------|
| | Number of Drains | Acres | Miles | Number of Drains | Miles |
| IID Project | 141 | 573,677 | 1,472.7 | 41 | 552.6 |
| New River | 62 | 174,499 | 399.9 | 10 | 292.2 |
| Alamo River | 84 | 335,438 | 918.1 | 14 | 159.4 |
| Salton Sea | 29 | 63,740 | 154.7 | 17 | 101.0 |

Use of Historical Drain Data

Historical drain data were used to estimate the drain inflow and salinity along the New and Alamo Rivers. These estimates are used to project the amount of drain water that may be available for present and future industrial uses such as geothermal power production. Also of interest are the salinity levels of the drain flows (potential water supplies) since the level of desalination required represents a cost.

Spatial and temporal distribution of drain flow into the New and Alamo Rivers were estimated by distributing flows along the rivers based on estimated and metered drain contribution. Unmetered drain flows were based on length of drains. The results provide monthly average and annual average flows.

USGS water quality data for the Alamo River and New River were used to estimate salt loading at each drain discharge point according to the flow contributions. Salt loading from Mexico was accounted based on the USGS measured salinity.. The determination of salinity for post-QSA conditions assumes a salt balance in the Valley and that salinity contribution from drainage across the Valley is uniform. It is known that there are some differences in salinity levels of drains due to soil difference that affect leaching. However, these conditions are expected to average out at the scale considered for characterizing drain water for future MCI water supply purposes.

The spatial association of flow data allows visual inspection of metered and un-metered drains and provides the means to estimate individual drain accretions to each river. This process also

allows the evaluation of changes in quantity and quality of river flows within river reaches and of those due to management induced changes resulting from water transfer and water conservation programs like the Quantified Settlement Agreement (QSA). Principal elements of concern are:

- Estimation of historical and post-QSA annual average and monthly average flows within drain based reaches of each river.
- Estimation of historical and post-QSA annual average and monthly average specific conductance and total dissolved solids within drain based reaches of each river.
- Of secondary concern are water quantity and quality associated with drains that discharge directly into the Salton Sea.

Available historical data were used to estimate discharge to rivers for unmetered drains based on uniform accretions and drain lengths. Total drainage to the Salton Sea included drainage flow associated with Alamo and New Rivers and that portion associated with drains that discharge directly to the Salton Sea. The post-QSA conditions are shown in Figure 2-4. Post-QSA conditions were estimated based on the following considerations.

- A 303,000 acre-foot reduction in water availability to IID as a result of QSA transfer reflects about 10% of the existing water supply to the Valley (Table 2), constituting about a 30% reduction in drain flow (approximately 303,000 acre-feet out of 1,000,000 acre-feet Salton Sea inflows from IID's Colorado River diversions).
- The 10% reduction in Colorado River inflow results in a corresponding reduction in salt into the Imperial Valley as a result of the QSA transfer.
- Impacts to salinity are accounted for by assuming that salt input to the Valley is reduced proportionately to the post-QSA water supply and that drainage conditions remain uniform and steady.
- Drain water and salt contributions to the rivers remain uniform from the International Border to the Salton Sea.

Table 3. Historic Deliveries to IID from the Colorado River.

| Year | Diversion | -----QSA Conservation----- | |
|---------|-----------|----------------------------|-------------|
| | | Ac-Ft | % Conserved |
| 1970 | 2,848,565 | 303,000 | 10.6 |
| 1971 | 2,967,907 | 303,000 | 10.2 |
| 1972 | 2,965,910 | 303,000 | 10.2 |
| 1973 | 3,047,899 | 303,000 | 9.9 |
| 1974 | 3,171,977 | 303,000 | 9.6 |
| 1975 | 3,070,974 | 303,000 | 9.9 |
| 1976 | 2,876,984 | 303,000 | 10.5 |
| 1977 | 2,772,062 | 303,000 | 10.9 |
| 1978 | 2,757,199 | 303,000 | 11.0 |
| 1979 | 2,884,235 | 303,000 | 10.5 |
| 1980 | 2,845,779 | 303,000 | 10.6 |
| 1981 | 2,872,289 | 303,000 | 10.5 |
| 1982 | 2,595,578 | 303,000 | 11.7 |
| 1983 | 2,555,617 | 303,000 | 11.9 |
| 1984 | 2,666,535 | 303,000 | 11.4 |
| 1985 | 2,685,837 | 303,000 | 11.3 |
| 1986 | 2,686,875 | 303,000 | 11.3 |
| 1987 | 2,764,865 | 303,000 | 11.0 |
| 1988 | 2,947,581 | 303,000 | 10.3 |
| 1989 | 3,009,451 | 303,000 | 10.1 |
| 1990 | 3,054,188 | 303,000 | 9.9 |
| 1991 | 2,898,963 | 303,000 | 10.5 |
| 1992 | 2,572,659 | 303,000 | 11.8 |
| 1993 | 2,772,148 | 303,000 | 10.9 |
| 1994 | 3,048,076 | 303,000 | 9.9 |
| 1995 | 3,070,582 | 303,000 | 9.9 |
| 1996 | 3,159,609 | 303,000 | 9.6 |
| 1997 | 3,158,486 | 303,000 | 9.6 |
| 1998 | 3,101,548 | 303,000 | 9.8 |
| 1999 | 3,088,980 | 303,000 | 9.8 |
| 2000 | 2,931,251 | 303,000 | 10.3 |
| 2001 | 3,089,911 | 303,000 | 9.8 |
| 2002 | 3,152,984 | 303,000 | 9.6 |
| 2003 | 2,978,223 | 303,000 | 10.2 |
| 2004 | 2,743,909 | 303,000 | 11.0 |
| 2005 | 2,756,846 | 303,000 | 11.0 |
| 2006 | 2,909,680 | 303,000 | 10.4 |
| 2007 | 2,872,754 | 303,000 | 10.5 |
| 2008 | 2,826,539 | 303,000 | 10.7 |
| | | | |
| Average | 2,902,089 | | 10.5 |
| Max | 3,171,977 | | 11.9 |
| Min | 2,555,617 | | 9.6 |
| Median | 2,898,963 | | 10.5 |

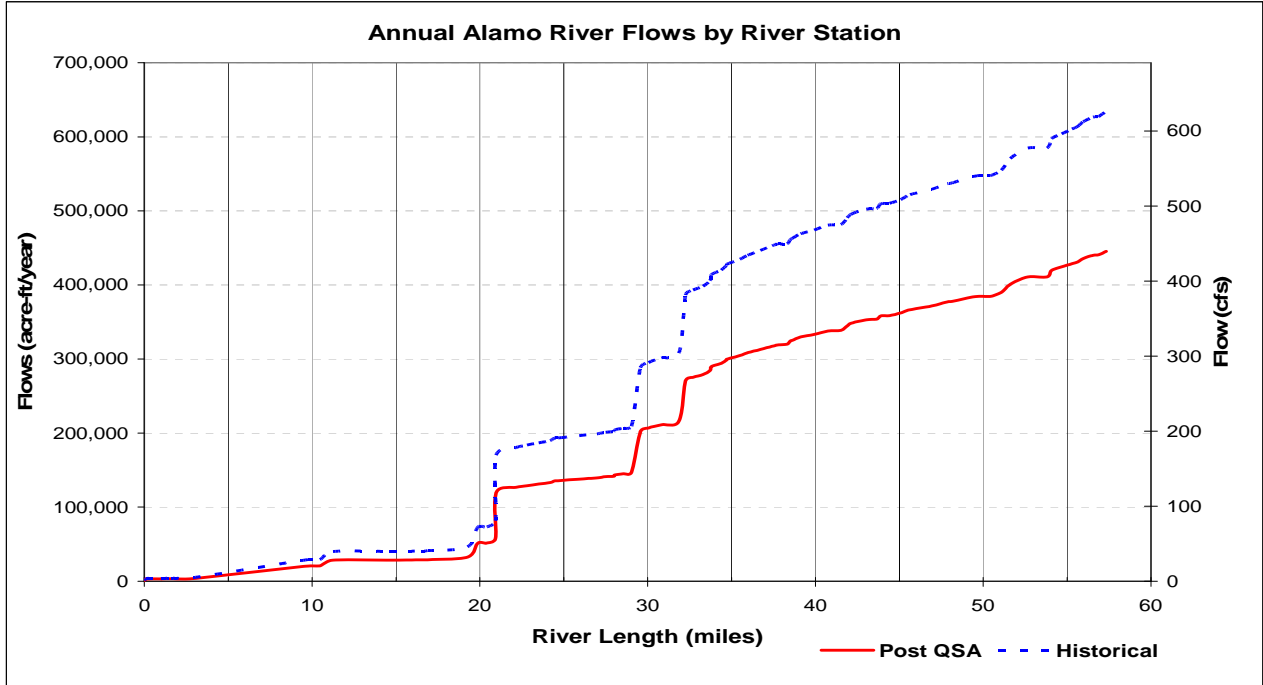


Figure 7: Annual Average Flow along reaches of the Alamo River from the International Border to the Salton Sea (post-QSA lower line).

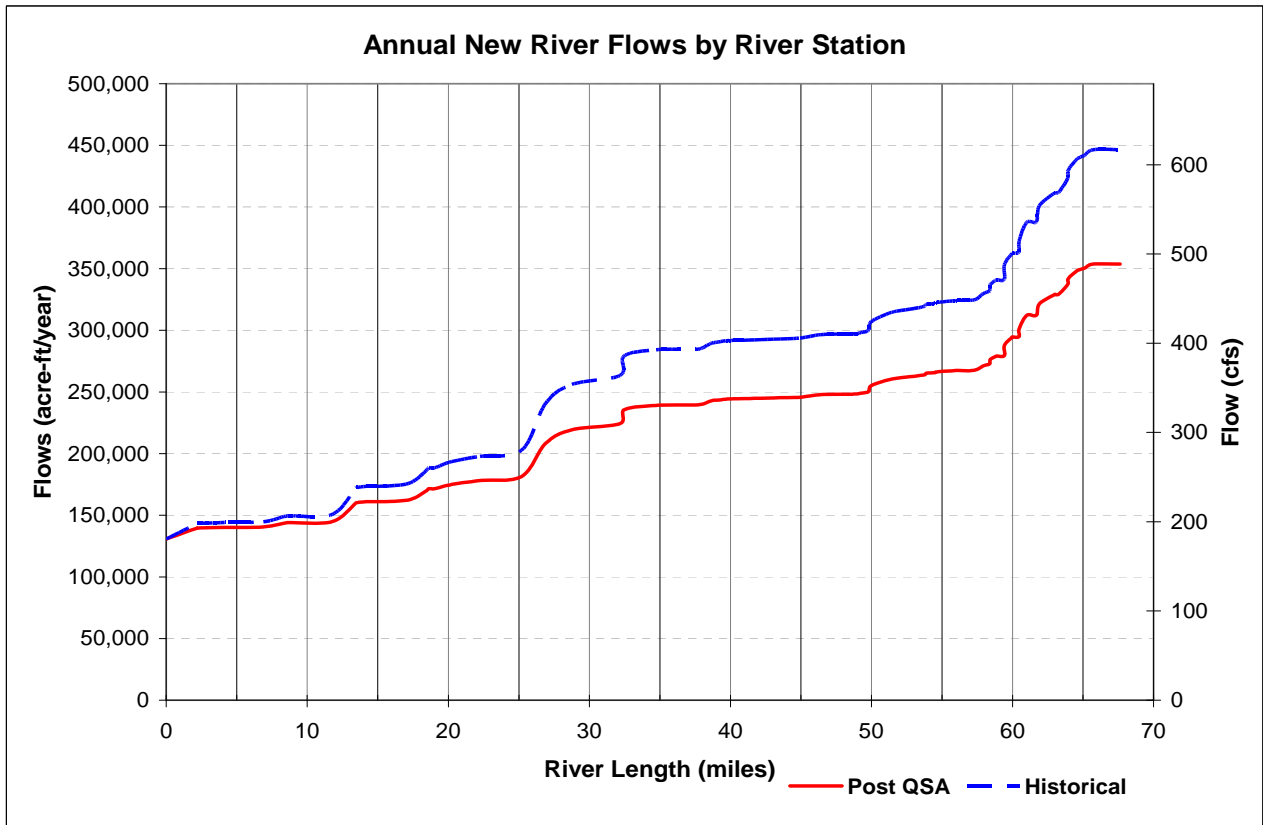


Figure 8: Annual Average Flow along reaches of the New River from the International Border to the Salton Sea (post-QSA lower line).

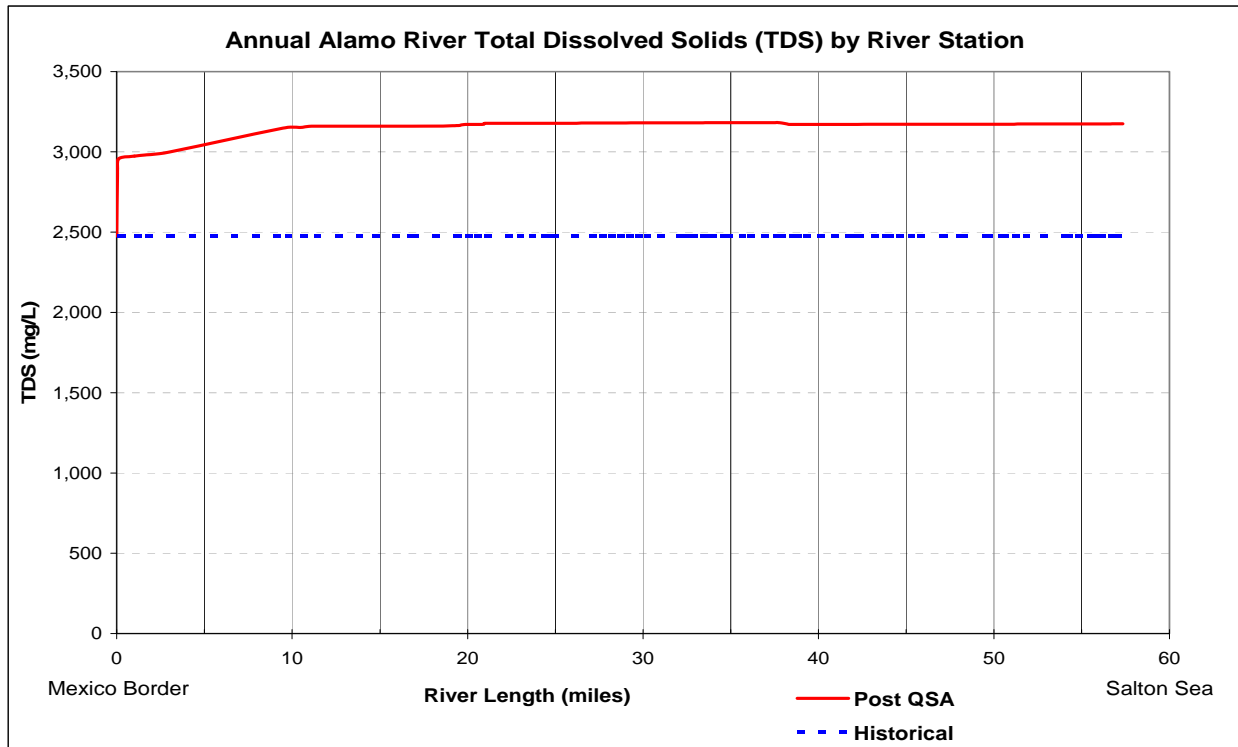


Figure 9: Annual Average TDS along reaches of the Alamo River (post-QSA upper line).

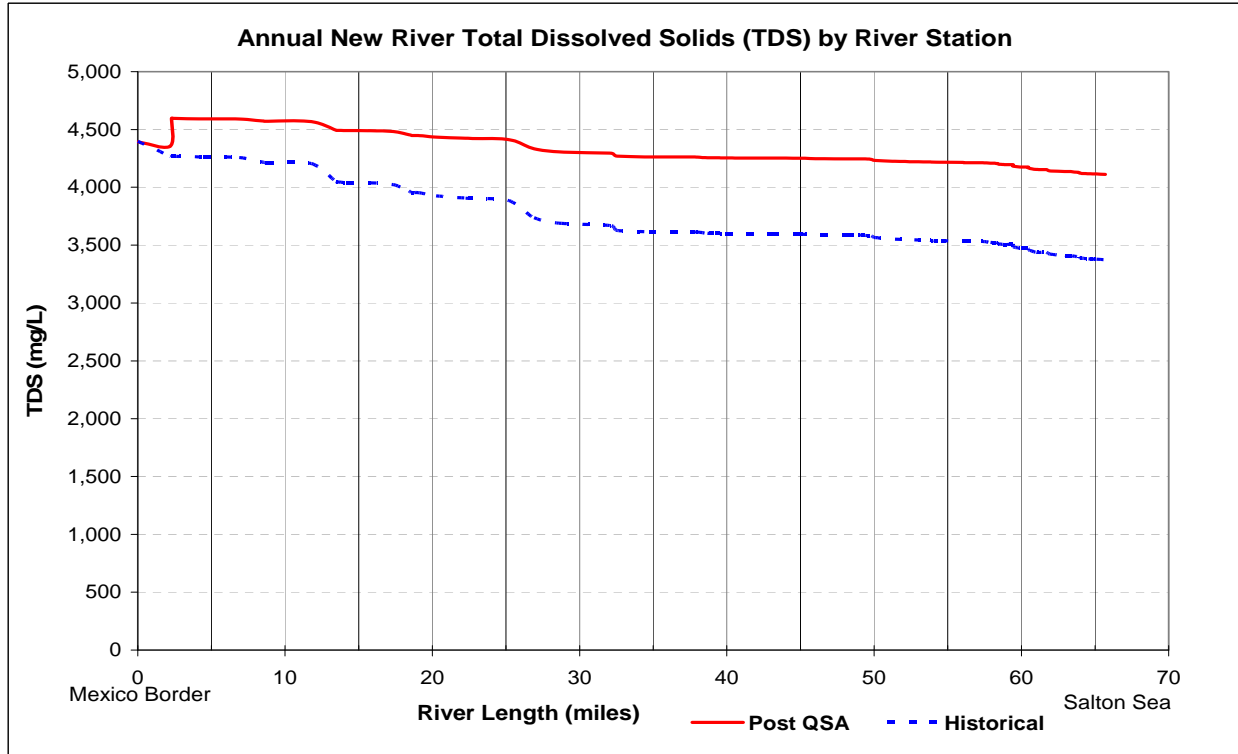


Figure 10: Annual Average TDS along reaches of the New River (post-QSA upper line).

Post-QSA Average Monthly Salinity within Reaches of the Alamo and New Rivers

Consideration of river flow variability is important when studying the quantity of water that can be reclaimed for uses other than discharge into the Salton Sea. Variability in salinity is important when considering costs of treatment and of suitability of the water supply. Figures 11 through 16 show the expected maximum, minimum and average monthly flow and TDS levels based on paired values for historical and expected post-QSA conditions. Paired data are data in which a flow measurement is accompanied by a salinity measurement. It is noted that New River flows the International border will likely decrease with time. Generally a decrease in return/drain flows result in an increase in salinity.

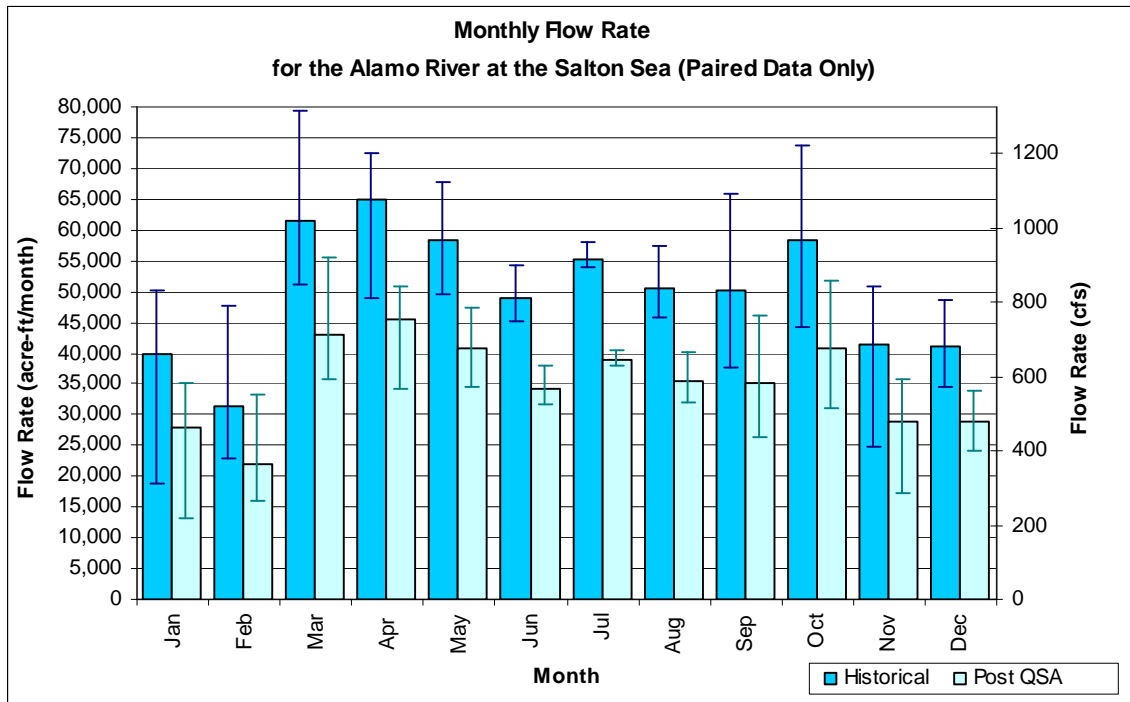


Figure 11: Maximum, Minimum, and Average Monthly Flow at the Salton Sea Station for the Alamo River.

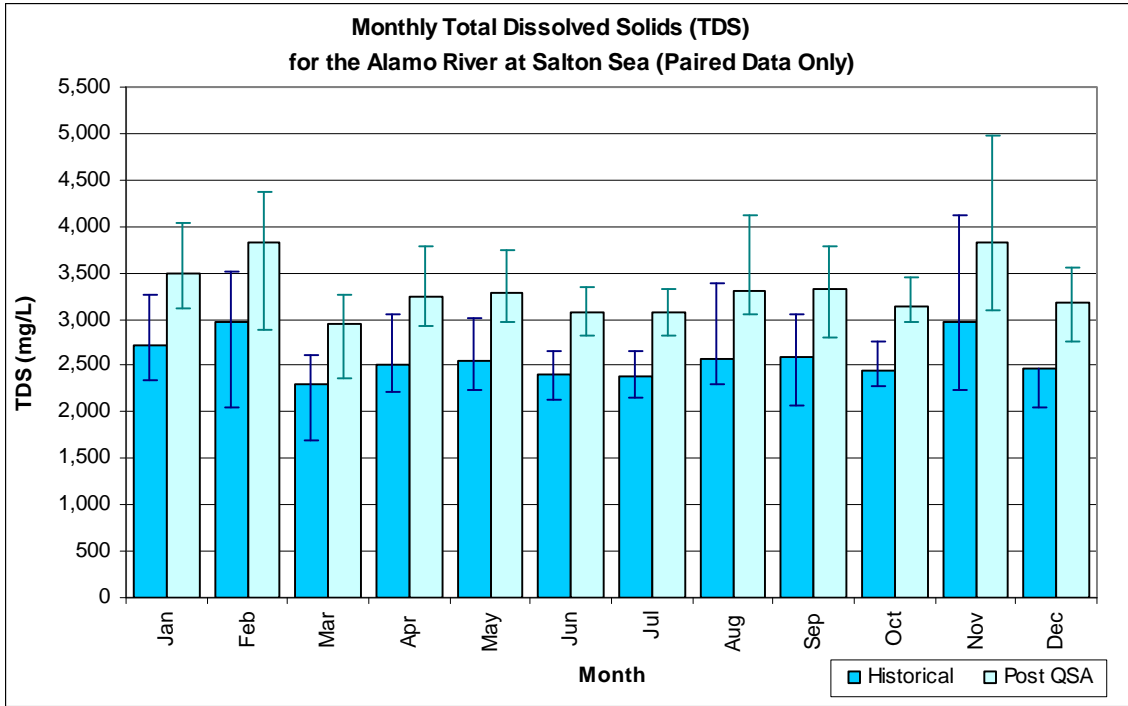


Figure12: Maximum, Minimum, and Average Monthly TDS at the Salton Sea Station for the Alamo River.

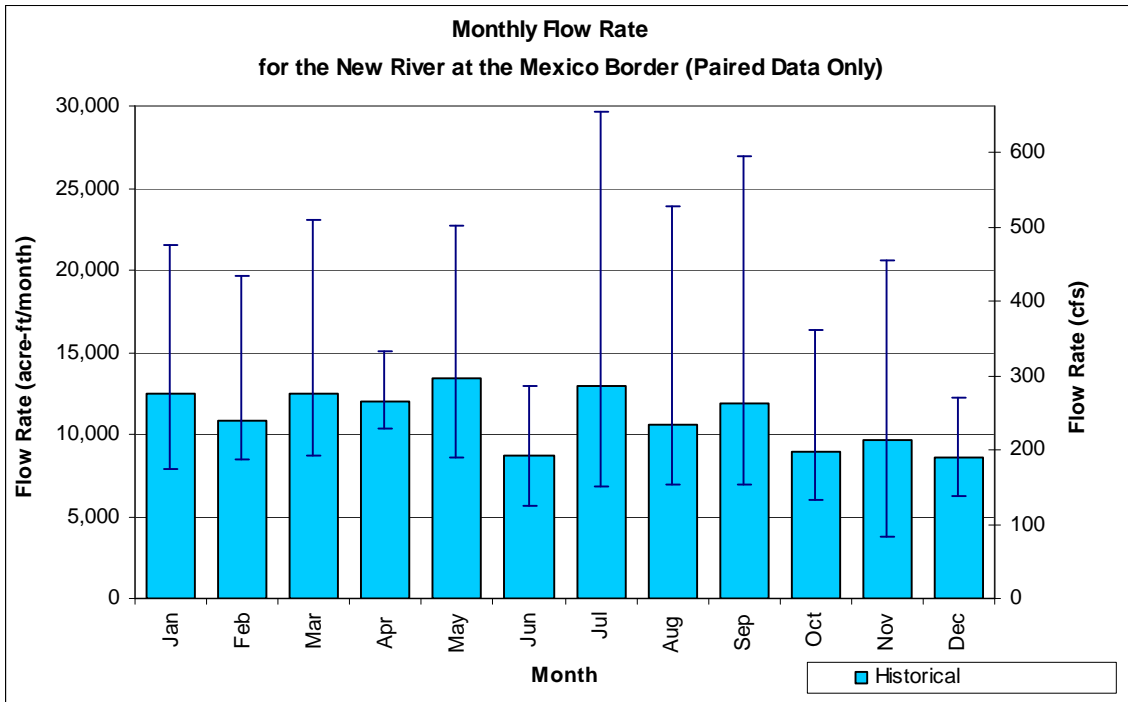


Figure 13: Maximum, Minimum, and Average Monthly Flow at the Mexico Border Station for the New River.

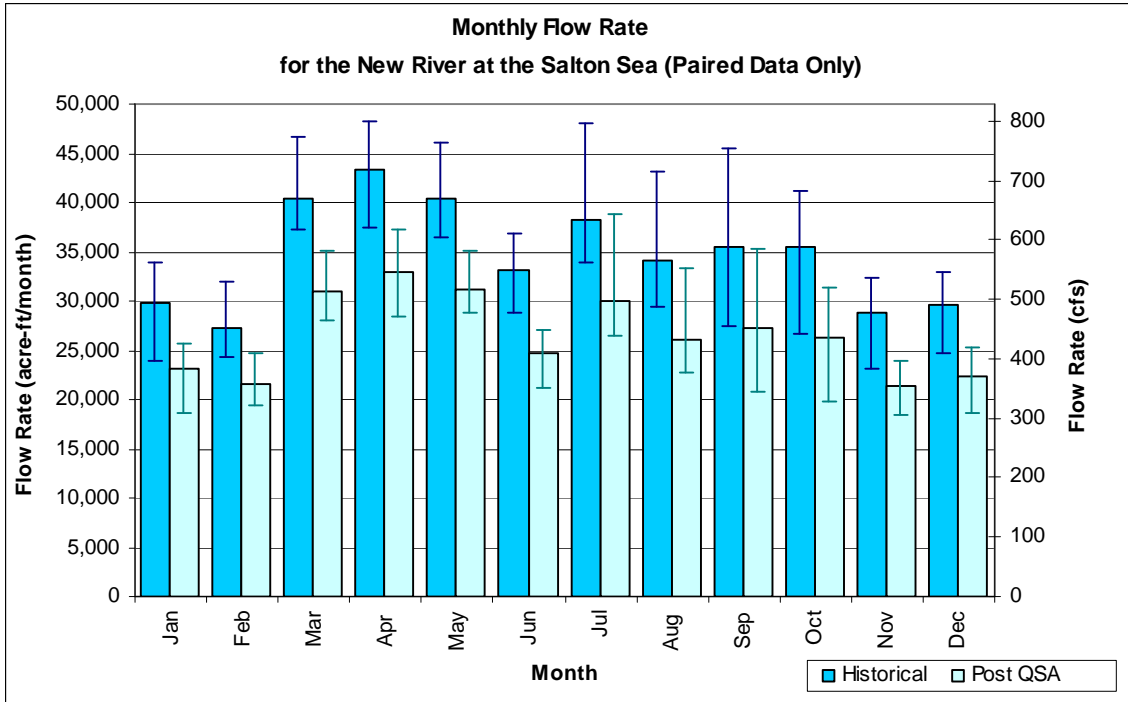


Figure 14: Max, Min and Average Monthly Flow at the Salton Sea Station for the New River.

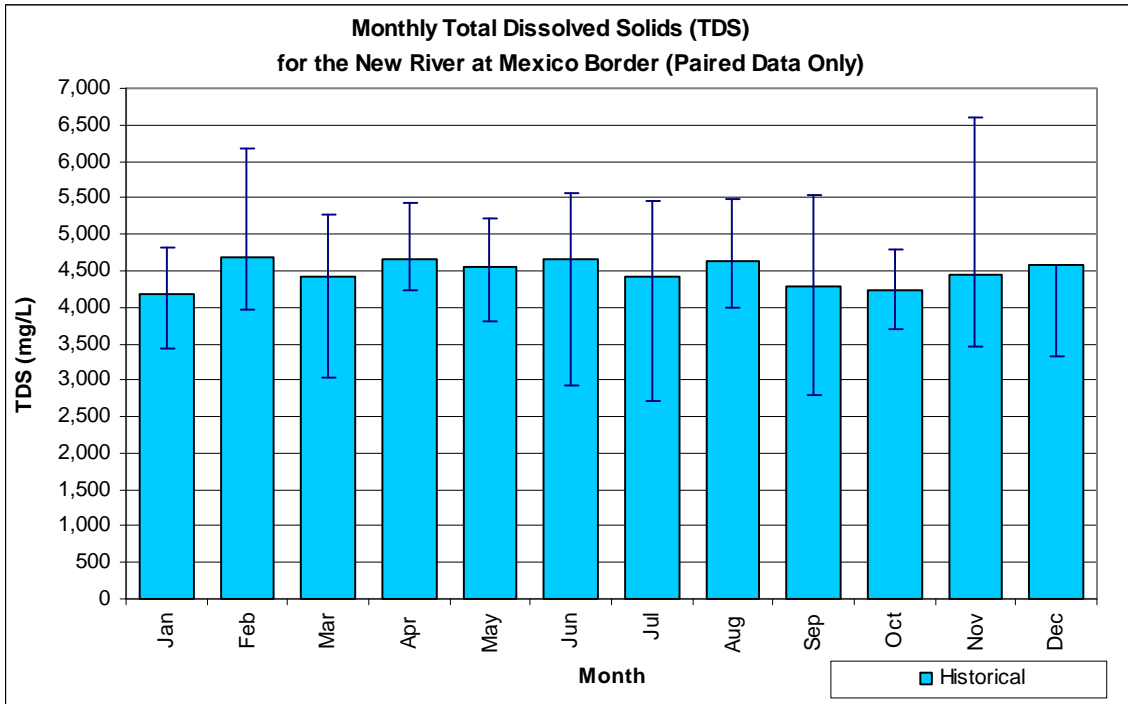


Figure 15: Maximum, Minimum, and Average Monthly TDS at the Mexico Border Station for the New River.

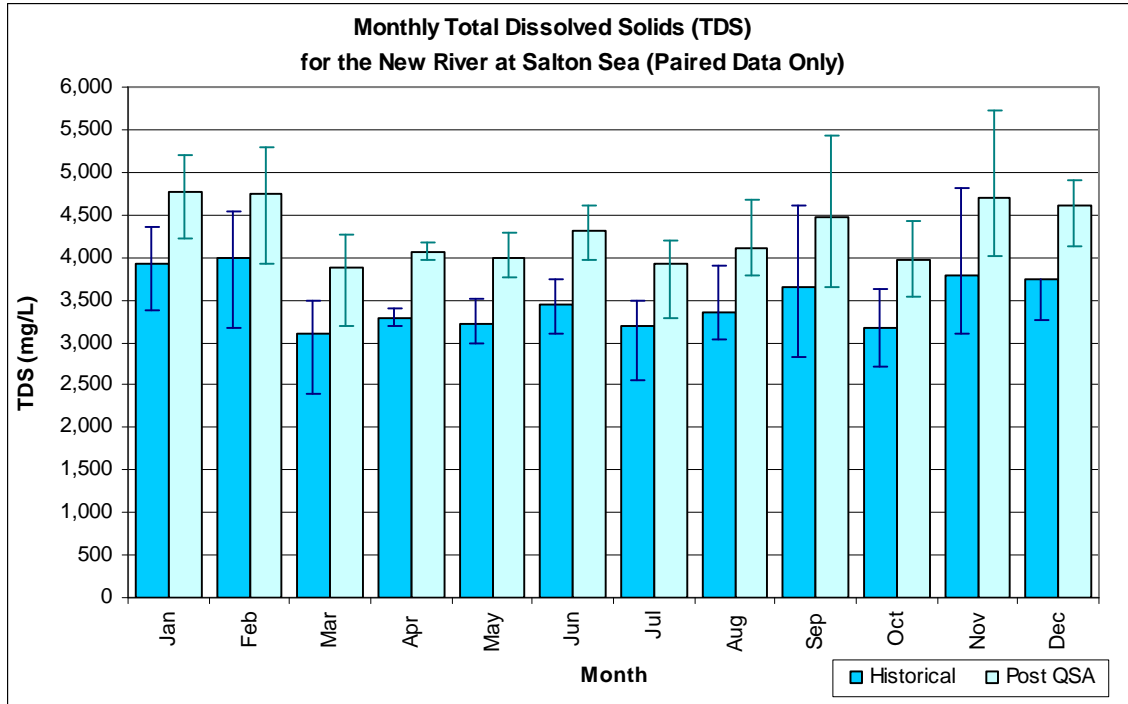


Figure 16: Maximum, Minimum, and Average Monthly TDS at the Salton Sea Station for the New River.

Tabular data associated with above figures and used in this analysis are found in the Appendices.

Utility of Specific Drains as Sources of Reclaimed Water

Drain data were reviewed to evaluate the potential of using reclaimed water for industrial use in the Keystone Industrial Development area (see Figure 17 and Plate 1). The potential of reclaiming water is from three larger drains, the Holtville Main, Central, and Rose drains. Estimated post-QSA drain flow and salinity at these locations is summarized in Table 4. The Holtville Main Drain has measured flows, flows for Rose and Central Drains were estimated as previously described. The three-drain system could reasonably provide about 90,000 acre-feet of water per year (70 percent of the low flow monthly average); with any two drains providing about 60,000 acre-feet per year. The waste stream (brine) for water desalination would need to be disposed of by containment and evaporation or deep well injection are discussed in Chapter 7.

Table 4. Estimated Post-QSA Drain Flows and Salinity for Holtville Main, Rose, and Central Drains.

| Drain | Average Annual (ac-ft) | Maximum Month (ac-ft) | Minimum Month (ac-ft) | Maximum TDS (mg/L) | Average TDS (mg/L) |
|--|------------------------|-----------------------|-----------------------|--------------------|--------------------|
| Holtville Main Drain | 55,600 | 5,800 | 3,300 | 3,670 | 3,190 |
| Rose Drain | 55,000 | 5,300 | 3,900 | 3,670 | 3,190 |
| Central Drain upstream of Mesquite Drain Cut Off | 59,900 | 6,300 | 3,600 | 3,670 | 3,190 |
| TOTAL | 170,500 | | 10,800 | | |

Existing drain systems can be modified by cross-connections to link and expand the usable and recoverable portion of drain water. In so doing, it will be necessary to re-grade existing channels to improve capacity and efficiency of drain flow concentration. One example consists of a linkage of the Central, Mesquite, Holtville Main and Rose drain systems, as shown on Plate 1. These combined drain systems could be used as a water supply for a Keystone Development area desalinization plant. In this case, a connection of the Central Drain would be constructed to tie into the upper Mesquite Drain system. Mesquite Drain capacity would need to be increased by about 60 cfs (3,600 ac-ft per month, which is the minimum flow at the Central Drain cut-off location). This capacity increase would require widening and deepening of the Mesquite Drain. This modified system could connect with Rose and Holtville Main Drains near Alamo River mile marker 30 as shown on Plate 1. To include water from the Holtville Main Drain, a conveyance system across the Alamo River would be required to connect to the combined system at the lower end of the Rose Drain, from where collected water will need to be transported to Keystone area.

Other options for reclaimed water supply would be from diverting water directly out of the New or Alamo River at the desired locations. All reclaimed water options are discussed in Section 7. Similar to water conservation measures that reduce flows in the drains and New and Alamo Rivers it is estimated that there will be an environmental mitigation cost of \$90 per acre-foot.

Conclusions:

Reclamation of agricultural drain water represents a significant and potentially useful source of water for uses within the Valley. The flow of recoverable drain water is more than ample to meet the raw water feed requirements for a 50,000 acre-ft per year (product water) desalinization plant. The water quality, specifically salinity, within the drain system varies between 2,702 and 3,680 (mg/L), representing post QSA conditions. The combined average drain flow of the Holtville Main, Mesquite, Central, and Rose drains is 170,200 acre-ft of water per year, which is more than adequate to supply a 50,000 acre-ft per year (finished water) desalinization plant. An environmental assessment would need to be conducted for any use of reclaimed drain water. Reclaimed drainage water can be developed incrementally as demands increases, subject to appropriate environmental approval and/or mitigation. Cost of water reclamation alternatives are discussed in Section 7 – Capital Project Alternatives.

APPENDICES

Water Quality and Flow Data for Alamo and New Rivers and for Drains within the IID Project Area

- For all tables, All individual drain values are for drain system located in first column
- Blue colored cells indicate drain system described in first column are metered

Appendix A: Geographic Information on Drains on the Alamo River

| Drain Station | Drain System Length (ft) | Length Between Systems (ft) | Cumulative Distance (ft) | Cumulative Distance from Mexico Border (mi) |
|----------------------------|--------------------------|-----------------------------|--------------------------|---|
| Alamo at Border | - | - | 0 | 0.0 |
| All American Drain No 5 | 12000 | 200 | 220 | 0.0 |
| All American Drain No 6 | 9000 | 300 | 510 | 0.1 |
| Toland Drain | 3000 | 4,900 | 5,380 | 1.0 |
| South Alamo Pipeline Drain | 1000 | 3,200 | 8,600 | 1.6 |
| South Alamo Drain No 1 | 3000 | 6,900 | 15,480 | 2.9 |
| Verde Drain Outlet | 215000 | 35,200 | 50,720 | 9.6 |
| Schali Pipeline Drain | 4000 | 4,500 | 55,230 | 10.5 |
| Warren Drain | 80000 | 4,200 | 59,440 | 11.3 |
| Barbara Worth Drain Spill | 1000 | 17,500 | 76,970 | 14.6 |
| Ash Drain | 1000 | 5,900 | 82,870 | 15.7 |
| Ash 20 Drain | 2000 | 4,400 | 87,310 | 16.5 |
| Holtville City Drain | 1000 | 1,400 | 88,680 | 16.8 |
| Barbara Worth Drain | 39000 | 13,100 | 101,750 | 19.3 |
| South Central Drain Outlet | 236000 | 3,200 | 104,930 | 19.9 |
| Ninth Street Drain | 4000 | 2,800 | 107,760 | 20.4 |
| Palmetto Drain | 63000 | 2,800 | 110,530 | 20.9 |
| Central Drain | 650000 | 200 | 110,740 | 21.0 |
| Peach Drain + Pampas Drain | 54000 | 6,200 | 116,950 | 22.1 |
| Plum Drain | 25000 | 3,500 | 120,400 | 22.8 |
| Pine Drain | 24000 | 3,700 | 124,140 | 23.5 |
| Palm Drain | 21000 | 3,600 | 127,720 | 24.2 |
| Pomelo Drain | 24000 | 1,400 | 129,080 | 24.4 |
| Graeser Drain | 5000 | 1,700 | 130,790 | 24.8 |
| Pepper Drain | 20000 | 6,100 | 136,910 | 25.9 |
| Township Drain | 17000 | 5,500 | 142,460 | 27.0 |
| Oat Drain | 17000 | 2,700 | 145,190 | 27.5 |
| Redwood 4 Drain | 6000 | 2,600 | 147,770 | 28.0 |
| Oasis Drain | 17000 | 200 | 148,010 | 28.0 |
| Orient Drain | 17000 | 2,700 | 150,700 | 28.5 |
| Occident Drain | 17000 | 2,600 | 153,350 | 29.0 |
| Holtville Main Drain | 540000 | 2,800 | 156,120 | 29.6 |
| Olive Drain | 49000 | 2,600 | 158,710 | 30.1 |
| Oxalis Drain | 47000 | 4,100 | 162,770 | 30.8 |
| Orange Drain | 47000 | 5,500 | 168,270 | 31.9 |
| Rose Drain Outlet | 577000 | 2,100 | 170,330 | 32.3 |
| Ohmar Drain | 49000 | 2,400 | 172,730 | 32.7 |
| Oleander Drain | 49000 | 3,100 | 175,810 | 33.3 |
| Bryant Drain | 55000 | 2,200 | 178,010 | 33.7 |
| Orita Drain | 60000 | 500 | 178,500 | 33.8 |
| Osage Drain | 44000 | 3,100 | 181,610 | 34.4 |
| Oak Drain | 45000 | 1,600 | 183,170 | 34.7 |

| Drain Station | Drain System Length (ft) | Length Between Systems (ft) | Cumulative Distance (ft) | Cumulative Distance from Mexico Border (mi) |
|--|--------------------------|-----------------------------|--------------------------|---|
| Wills Drain | 16000 | 200 | 183,380 | 34.7 |
| Moss Drain | 49000 | 4,000 | 187,410 | 35.5 |
| Magnolia Drain + Moorhead Lateral 3 Spillway | 49000 | 2,500 | 189,870 | 36.0 |
| Mesquite Lateral Drain | 46000 | 4,000 | 193,910 | 36.7 |
| Maple Drain | 47000 | 3,700 | 197,650 | 37.4 |
| Darling Drain | 18000 | 1,800 | 199,400 | 37.8 |
| Moorhead Pipeline Drain | 12000 | 2,900 | 202,330 | 38.3 |
| Mullen Drain | 43000 | 900 | 203,270 | 38.5 |
| Moorhead Pipeline Drain | 12000 | 700 | 203,930 | 38.6 |
| Myrtle Drain | 46000 | 2,700 | 206,590 | 39.1 |
| Munyon Drain | 47000 | 4,300 | 210,870 | 39.9 |
| Mulberry Drain | 48000 | 4,200 | 215,110 | 40.7 |
| Lewis Drain | 8000 | 4,100 | 219,190 | 41.5 |
| Malva 2 Drain | 65000 | 2,100 | 221,260 | 41.9 |
| Mayflower Drain | 53000 | 1,300 | 222,540 | 42.1 |
| Marigold Drain | 49000 | 4,700 | 227,250 | 43.0 |
| Jones Drain | 6000 | 3,200 | 230,460 | 43.6 |
| Standard Drain | 63000 | 1,400 | 231,840 | 43.9 |
| Bailey Drain | 3000 | 2,700 | 234,530 | 44.4 |
| Narcissus Drain | 53000 | 3,500 | 238,040 | 45.1 |
| Nettle Drain | 52000 | 3,000 | 240,990 | 45.6 |
| Nutmeg Drain | 54000 | 6,900 | 247,840 | 46.9 |
| Nectarine Drain | 56000 | 4,900 | 252,730 | 47.9 |
| Rockwood Drain | 5000 | 1,400 | 254,140 | 48.1 |
| C Drain + B Drain | 59000 | 7,300 | 261,470 | 49.5 |
| C Lateral 1 Spill | 1000 | 3,800 | 265,320 | 50.2 |
| Vail 1 Drain | 4000 | 1,100 | 266,430 | 50.5 |
| D Drain | 53000 | 3,300 | 269,720 | 51.1 |
| E Drain + F Drain | 116000 | 2,900 | 272,570 | 51.6 |
| G Drain + H Drain | 104000 | 5,500 | 278,080 | 52.7 |
| Vail 1 Spill | 1000 | 6,100 | 284,130 | 53.8 |
| I Drain | 57000 | 1,400 | 285,550 | 54.1 |
| J Drain | 50000 | 3,100 | 288,660 | 54.7 |
| K Drain | 47000 | 3,300 | 291,970 | 55.3 |
| Vail 2 Spill + Pumice Drain | 25000 | 1,900 | 293,830 | 55.7 |
| L Drain | 49000 | 1,700 | 295,490 | 56.0 |
| M Drain | 44000 | 3,100 | 298,590 | 56.6 |
| Vail 2A Drain | 8000 | 1,800 | 300,410 | 56.9 |
| N Drain | 44000 | 2,300 | 302,760 | 57.3 |
| Alamo at Salton Sea | - | 7,200 | 309,940 | 58.7 |

Appendix B: Historical Flow and Salt Contribution from Drains on the Alamo River

| Drain Station | Cumulative Distance from Mexico Border | Flow from Drain | Cumulative Flow | Cumulative Flow | Total Annual TDS |
|----------------------------|--|-----------------|-----------------|-----------------|------------------|
| | (mi) | (acre-ft) | (acre-ft) | (cfs) | (mg/L) |
| Alamo at Border | 0.0 | 1,000 | 1,000 | 0 | 2,500 |
| All American Drain No 5 | 0.0 | 1,700 | 2,600 | 0 | 2,500 |
| All American Drain No 6 | 0.1 | 1,200 | 3,800 | 10 | 2,500 |
| Toland Drain | 1.0 | 400 | 4,200 | 10 | 2,500 |
| South Alamo Pipeline Drain | 1.6 | 200 | 4,300 | 10 | 2,500 |
| South Alamo Drain No 1 | 2.9 | 400 | 4,800 | 10 | 2,500 |
| Verde Drain Outlet | 9.6 | 24,000 | 28,700 | 40 | 2,500 |
| Schali Pipeline Drain | 10.5 | 500 | 29,300 | 40 | 2,500 |
| Warren Drain | 11.3 | 10,900 | 40,200 | 60 | 2,500 |
| Barbara Worth Drain Spill | 14.6 | 200 | 40,400 | 60 | 2,500 |
| Ash Drain | 15.7 | 200 | 40,600 | 60 | 2,500 |
| Ash 20 Drain | 16.5 | 300 | 40,900 | 60 | 2,500 |
| Holtville City Drain | 16.8 | 100 | 41,000 | 60 | 2,500 |
| Barbara Worth Drain | 19.3 | 5,300 | 46,300 | 60 | 2,500 |
| South Central Drain Outlet | 19.9 | 26,500 | 72,800 | 100 | 2,500 |
| Ninth Street Drain | 20.4 | 500 | 73,300 | 100 | 2,500 |
| Palmetto Drain | 20.9 | 8,500 | 81,800 | 110 | 2,500 |
| Central Drain | 21.0 | 88,400 | 170,200 | 240 | 2,500 |
| Peach Drain + Pampas Drain | 22.1 | 10,200 | 180,400 | 250 | 2,500 |
| Plum Drain | 22.8 | 3,300 | 183,800 | 250 | 2,500 |
| Pine Drain | 23.5 | 3,200 | 187,000 | 260 | 2,500 |
| Palm Drain | 24.2 | 2,900 | 189,900 | 260 | 2,500 |
| Pomelo Drain | 24.4 | 3,200 | 193,200 | 270 | 2,500 |
| Graeser Drain | 24.8 | 600 | 193,800 | 270 | 2,500 |
| Pepper Drain | 25.9 | 2,800 | 196,500 | 270 | 2,500 |
| Township Drain | 27.0 | 2,300 | 198,900 | 270 | 2,500 |
| Oat Drain | 27.5 | 2,300 | 201,200 | 280 | 2,500 |
| Redwood 4 Drain | 28.0 | 900 | 202,100 | 280 | 2,500 |
| Oasis Drain | 28.0 | 2,300 | 204,400 | 280 | 2,500 |
| Orient Drain | 28.5 | 2,400 | 206,800 | 290 | 2,500 |
| Occident Drain | 29.0 | 2,300 | 209,100 | 290 | 2,500 |
| Holtville Main Drain | 29.6 | 79,400 | 288,500 | 400 | 2,500 |
| Olive Drain | 30.1 | 6,700 | 295,200 | 410 | 2,500 |
| Oxalis Drain | 30.8 | 6,400 | 301,500 | 420 | 2,500 |
| Orange Drain | 31.9 | 6,300 | 307,900 | 430 | 2,500 |
| Rose Drain Outlet | 32.3 | 78,500 | 386,400 | 530 | 2,500 |
| Ohmar Drain | 32.7 | 6,700 | 393,100 | 540 | 2,500 |
| Oleander Drain | 33.3 | 5,200 | 398,300 | 550 | 2,500 |
| Bryant Drain | 33.7 | 7,400 | 405,800 | 560 | 2,500 |
| Orita Drain | 33.8 | 8,100 | 413,900 | 570 | 2,500 |
| Osage Drain | 34.4 | 6,000 | 419,900 | 580 | 2,500 |
| Oak Drain | 34.7 | 6,100 | 426,000 | 590 | 2,500 |

| Drain Station | Cumulative Distance from Mexico Border | Flow from Drain | Cumulative Flow | Cumulative Flow | Total Annual TDS |
|--|--|-----------------|-----------------|-----------------|------------------|
| | (mi) | (acre-ft) | (acre-ft) | (cfs) | (mg/L) |
| Wills Drain | 34.7 | 2,100 | 428,100 | 590 | 2,500 |
| Moss Drain | 35.5 | 6,600 | 434,700 | 600 | 2,500 |
| Magnolia Drain + Moorhead Lateral 3 Spillway | 36.0 | 5,500 | 440,200 | 610 | 2,500 |
| Mesquite Lateral Drain | 36.7 | 6,300 | 446,500 | 620 | 2,500 |
| Maple Drain | 37.4 | 6,400 | 452,800 | 630 | 2,500 |
| Darling Drain | 37.8 | 2,400 | 455,300 | 630 | 2,500 |
| Moorhead Pipeline Drain | 38.3 | 1,600 | 455,300 | 630 | 2,500 |
| Mullen Drain | 38.5 | 5,800 | 461,100 | 640 | 2,500 |
| Moorhead Pipeline Drain | 38.6 | 1,600 | 462,700 | 640 | 2,500 |
| Myrtle Drain | 39.1 | 6,300 | 469,000 | 650 | 2,500 |
| Munyon Drain | 39.9 | 5,000 | 474,100 | 650 | 2,500 |
| Mulberry Drain | 40.7 | 6,600 | 480,600 | 660 | 2,500 |
| Lewis Drain | 41.5 | 1,100 | 481,700 | 670 | 2,500 |
| Malva 2 Drain | 41.9 | 8,900 | 490,600 | 680 | 2,500 |
| Mayflower Drain | 42.1 | 5,100 | 495,700 | 680 | 2,500 |
| Marigold Drain | 43.0 | 6,600 | 502,400 | 690 | 2,500 |
| Jones Drain | 43.6 | 800 | 503,200 | 700 | 2,500 |
| Standard Drain | 43.9 | 6,600 | 509,700 | 700 | 2,500 |
| Bailey Drain | 44.4 | 400 | 510,200 | 700 | 2,500 |
| Narcissus Drain | 45.1 | 5,200 | 515,400 | 710 | 2,500 |
| Nettle Drain | 45.6 | 6,300 | 521,700 | 720 | 2,500 |
| Nutmeg Drain | 46.9 | 7,300 | 529,000 | 730 | 2,500 |
| Nectarine Drain | 47.9 | 7,700 | 536,700 | 740 | 2,500 |
| Rockwood Drain | 48.1 | 700 | 537,400 | 740 | 2,500 |
| C Drain + B Drain | 49.5 | 9,500 | 546,900 | 760 | 2,500 |
| C Lateral 1 Spill | 50.2 | 200 | 547,100 | 760 | 2,500 |
| Vail 1 Drain | 50.5 | 600 | 547,600 | 760 | 2,500 |
| D Drain | 51.1 | 7,200 | 554,900 | 770 | 2,500 |
| E Drain + F Drain | 51.6 | 15,800 | 570,600 | 790 | 2,500 |
| G Drain + H Drain | 52.7 | 14,200 | 584,800 | 810 | 2,500 |
| Vail 1 Spill | 53.8 | 200 | 584,900 | 810 | 2,500 |
| I Drain | 54.1 | 12,300 | 597,300 | 830 | 2,500 |
| J Drain | 54.7 | 6,900 | 604,100 | 830 | 2,500 |
| K Drain | 55.3 | 6,300 | 610,500 | 840 | 2,500 |
| Vail 2 Spill + Pumice Drain | 55.7 | 3,400 | 613,900 | 850 | 2,500 |
| L Drain | 56.0 | 6,600 | 620,500 | 860 | 2,500 |
| M Drain | 56.6 | 6,000 | 626,500 | 870 | 2,500 |
| Vail 2A Drain | 56.9 | 1,100 | 627,600 | 870 | 2,500 |
| N Drain | 57.3 | 6,800 | 634,400 | 880 | 2,500 |
| Alamo at Salton Sea | 58.7 | 6,800 | 634,400 | 880 | 2,500 |

Appendix C: Post QSA Flow and Salt Contribution from Drains on the Alamo River

| Drain Station | Cumulative Distance from Mexico Border | Post QSA Drainage Flow | Post QSA Cumulative Flow | Post QSA Cumulative Flow | Post QSA Cumulative TDS |
|----------------------------|--|------------------------|--------------------------|--------------------------|-------------------------|
| | (mi) | (acre-ft) | (acre-ft) | (cfs) | (mg/L) |
| Alamo at Border | 0.0 | 1,000 | 1,000 | 0 | 2,500 |
| All American Drain No 5 | 0.0 | 1,200 | 2,000 | 0 | 2,900 |
| All American Drain No 6 | 0.1 | 800 | 3,000 | 0 | 3,200 |
| Toland Drain | 1.0 | 200 | 3,000 | 0 | 3,200 |
| South Alamo Pipeline Drain | 1.6 | 100 | 3,000 | 0 | 3,200 |
| South Alamo Drain No 1 | 2.9 | 300 | 4,000 | 10 | 3,200 |
| Verde Drain Outlet | 9.6 | 16,800 | 20,000 | 30 | 3,200 |
| Schali Pipeline Drain | 10.5 | 400 | 21,000 | 30 | 3,200 |
| Warren Drain | 11.3 | 7,600 | 28,000 | 40 | 3,200 |
| Barbara Worth Drain Spill | 14.6 | 100 | 29,000 | 40 | 3,200 |
| Ash Drain | 15.7 | 100 | 29,000 | 40 | 3,200 |
| Ash 20 Drain | 16.5 | 200 | 29,000 | 40 | 3,200 |
| Holtville City Drain | 16.8 | 100 | 29,000 | 40 | 3,200 |
| Barbara Worth Drain | 19.3 | 3,700 | 33,000 | 50 | 3,200 |
| South Central Drain Outlet | 19.9 | 18,500 | 51,000 | 70 | 3,200 |
| Ninth Street Drain | 20.4 | 300 | 52,000 | 70 | 3,200 |
| Palmetto Drain | 20.9 | 6,000 | 58,000 | 80 | 3,200 |
| Central Drain | 21.0 | 61,900 | 119,000 | 160 | 3,200 |
| Peach Drain + Pampas Drain | 22.1 | 7,100 | 127,000 | 180 | 3,200 |
| Plum Drain | 22.8 | 2,300 | 129,000 | 180 | 3,200 |
| Pine Drain | 23.5 | 2,300 | 131,000 | 180 | 3,200 |
| Palm Drain | 24.2 | 2,000 | 133,000 | 180 | 3,200 |
| Pomelo Drain | 24.4 | 2,300 | 135,000 | 190 | 3,200 |
| Graeser Drain | 24.8 | 400 | 136,000 | 190 | 3,200 |
| Pepper Drain | 25.9 | 1,900 | 138,000 | 190 | 3,200 |
| Township Drain | 27.0 | 1,600 | 140,000 | 190 | 3,200 |
| Oat Drain | 27.5 | 1,600 | 141,000 | 190 | 3,200 |
| Redwood 4 Drain | 28.0 | 600 | 142,000 | 200 | 3,200 |
| Oasis Drain | 28.0 | 1,600 | 143,000 | 200 | 3,200 |
| Orient Drain | 28.5 | 1,600 | 145,000 | 200 | 3,200 |
| Occident Drain | 29.0 | 1,600 | 147,000 | 200 | 3,200 |
| Holtville Main Drain | 29.6 | 55,600 | 202,000 | 280 | 3,200 |
| Olive Drain | 30.1 | 4,700 | 207,000 | 290 | 3,200 |
| Oxalis Drain | 30.8 | 4,400 | 211,000 | 290 | 3,200 |
| Orange Drain | 31.9 | 4,400 | 216,000 | 300 | 3,200 |
| Rose Drain Outlet | 32.3 | 55,000 | 271,000 | 370 | 3,200 |
| Ohmar Drain | 32.7 | 4,700 | 275,000 | 380 | 3,200 |
| Oleander Drain | 33.3 | 3,700 | 279,000 | 390 | 3,200 |
| Bryant Drain | 33.7 | 5,200 | 284,000 | 390 | 3,200 |

| Drain Station | Cumulative Distance from Mexico Border | Post QSA Drainage Flow | Post QSA Cumulative Flow | Post QSA Cumulative Flow | Post QSA Cumulative TDS |
|--|--|------------------------|--------------------------|--------------------------|-------------------------|
| | (mi) | (acre-ft) | (acre-ft) | (cfs) | (mg/L) |
| Orita Drain | 33.8 | 5,700 | 290,000 | 400 | 3,200 |
| Osage Drain | 34.4 | 4,200 | 294,000 | 410 | 3,200 |
| Oak Drain | 34.7 | 4,200 | 298,000 | 410 | 3,200 |
| Wills Drain | 34.7 | 1,500 | 300,000 | 410 | 3,200 |
| Moss Drain | 35.5 | 4,600 | 305,000 | 420 | 3,200 |
| Magnolia Drain + Moorhead Lateral 3 Spillway | 36.0 | 3,800 | 308,000 | 430 | 3,200 |
| Mesquite Lateral Drain | 36.7 | 4,400 | 313,000 | 430 | 3,200 |
| Maple Drain | 37.4 | 4,500 | 317,000 | 440 | 3,200 |
| Darling Drain | 37.8 | 1,700 | 319,000 | 440 | 3,200 |
| Moorhead Pipeline Drain | 38.3 | 1,100 | 320,000 | 440 | 3,200 |
| Mullen Drain | 38.5 | 4,100 | 324,000 | 450 | 3,200 |
| Moorhead Pipeline Drain | 38.6 | 1,100 | 325,000 | 450 | 3,200 |
| Myrtle Drain | 39.1 | 4,400 | 330,000 | 460 | 3,200 |
| Munyon Drain | 39.9 | 3,500 | 333,000 | 460 | 3,200 |
| Mulberry Drain | 40.7 | 4,600 | 338,000 | 470 | 3,200 |
| Lewis Drain | 41.5 | 800 | 339,000 | 470 | 3,200 |
| Malva 2 Drain | 41.9 | 6,200 | 345,000 | 480 | 3,200 |
| Mayflower Drain | 42.1 | 3,600 | 348,000 | 480 | 3,200 |
| Marigold Drain | 43.0 | 4,600 | 353,000 | 490 | 3,200 |
| Jones Drain | 43.6 | 500 | 354,000 | 490 | 3,200 |
| Standard Drain | 43.9 | 4,600 | 358,000 | 490 | 3,200 |
| Bailey Drain | 44.4 | 300 | 359,000 | 500 | 3,200 |
| Narcissus Drain | 45.1 | 3,600 | 362,000 | 500 | 3,200 |
| Nettle Drain | 45.6 | 4,400 | 367,000 | 510 | 3,200 |
| Nutmeg Drain | 46.9 | 5,100 | 372,000 | 510 | 3,200 |
| Nectarine Drain | 47.9 | 5,400 | 377,000 | 520 | 3,200 |
| Rockwood Drain | 48.1 | 500 | 378,000 | 520 | 3,200 |
| C Drain + B Drain | 49.5 | 6,600 | 384,000 | 530 | 3,200 |
| C Lateral 1 Spill | 50.2 | 100 | 384,000 | 530 | 3,200 |
| Vail 1 Drain | 50.5 | 400 | 385,000 | 530 | 3,200 |
| D Drain | 51.1 | 5,100 | 390,000 | 540 | 3,200 |
| E Drain + F Drain | 51.6 | 11,000 | 401,000 | 550 | 3,200 |
| G Drain + H Drain | 52.7 | 9,900 | 411,000 | 570 | 3,200 |
| Vail 1 Spill | 53.8 | 100 | 411,000 | 570 | 3,200 |
| I Drain | 54.1 | 8,600 | 419,000 | 580 | 3,200 |
| J Drain | 54.7 | 4,800 | 424,000 | 590 | 3,200 |
| K Drain | 55.3 | 4,400 | 429,000 | 590 | 3,200 |
| Vail 2 Spill + Pumice Drain | 55.7 | 2,400 | 431,000 | 600 | 3,200 |
| L Drain | 56.0 | 4,600 | 436,000 | 600 | 3,200 |
| M Drain | 56.6 | 4,200 | 440,000 | 610 | 3,200 |
| Vail 2A Drain | 56.9 | 800 | 441,000 | 610 | 3,200 |
| N Drain | 57.3 | 4,800 | 445,000 | 610 | 3,200 |
| Alamo at Salton Sea | 58.7 | - | 445,000 | 610 | 3,200 |

Appendix D: Geographic Information on Drains on the New River

| Drain Station | Drain System Length | Length Between Systems | Cumulative Distance from Mexico Border | Cumulative Distance from Mexico Border |
|---------------------------|---------------------|------------------------|--|--|
| | (ft) | (ft) | (ft) | (mi) |
| New River at Border | 0 | 11,600 | 12,000 | 2.20 |
| All American Drain No 9 | 74,000 | 500 | 12,000 | 2.29 |
| All American Drain No 9 | 74,000 | 800 | 13,000 | 2.44 |
| All American Drain No 14 | 1,000 | 10,500 | 23,000 | 4.43 |
| Birch No 3 Pipeline Drain | 4,000 | 13,000 | 36,000 | 6.89 |
| Beech Spill | 3,000 | 8,400 | 45,000 | 8.47 |
| Beech Drain | 27,000 | 1,500 | 46,000 | 8.75 |
| Dahlia Spill | 3,000 | 16,000 | 62,000 | 11.79 |
| Elder Drain No 1 | 6,000 | 8,700 | 71,000 | 13.44 |
| Greeson Drain | 224,000 | 700 | 72,000 | 13.57 |
| Elder Drain No 3 Pipeline | 2,000 | 3,300 | 75,000 | 14.19 |
| Blue Lake Drain | 5,000 | 8,500 | 83,000 | 15.80 |
| Elder Spill | 2,000 | 8,200 | 92,000 | 17.35 |
| Wormwood 7 Drain | 15,000 | 5,600 | 97,000 | 18.41 |
| Fig Drain | 43,000 | 1,100 | 98,000 | 18.61 |
| Wixom Drain | 15,000 | 2,300 | 101,000 | 19.04 |
| Elder Lateral 7 Spill | 0 | 6,400 | 107,000 | 20.25 |
| Seeley Drain | 29,000 | 10,500 | 117,000 | 22.25 |
| Bullhead Slough | 4,000 | 15,600 | 133,000 | 25.20 |
| Elder 14 Drain | 28,000 | 9,000 | 142,000 | 26.91 |
| Salt Creek | 223,000 | 9,700 | 152,000 | 28.75 |
| Flax Drain | 89,000 | 18,100 | 170,000 | 32.17 |
| Fillaree Drain | 43,000 | 1,600 | 171,000 | 32.47 |
| Rice 3 Drain | 172,000 | 11,900 | 183,000 | 34.73 |
| Rice Drain | 59,000 | 14,900 | 198,000 | 37.55 |
| Sumac 1 Spill | 2,000 | 2,400 | 201,000 | 38.00 |
| Sumac Drain | 6,000 | 3,600 | 204,000 | 38.69 |
| North Central Drain | 68,000 | 2,600 | 207,000 | 39.17 |
| Sumac Drain No 2 | 4,000 | 3,900 | 211,000 | 39.91 |
| Cook Drain | 7,000 | 7,500 | 218,000 | 41.33 |
| Lilac 4 Spill | 3,000 | 9,300 | 227,000 | 43.08 |
| Malan Drain | 4,000 | 9,700 | 237,000 | 44.93 |
| Mansfield Tile Drain | 5,000 | 7,800 | 245,000 | 46.41 |
| Gardner Drain | 17,000 | 9,100 | 254,000 | 48.14 |
| Smilax Spill | 3,000 | 4,100 | 258,000 | 48.92 |
| Stanley Lateral 1 Spill | 1,000 | 1,800 | 260,000 | 49.26 |
| Spruce 1 Drain | 6,000 | 2,800 | 263,000 | 49.80 |
| Spruce 3 Drain | 10,000 | 900 | 264,000 | 49.98 |
| Livesley Drain | 42,000 | 7,600 | 271,000 | 51.42 |
| Spruce Drain | 56,000 | 6,900 | 278,000 | 52.73 |
| Best Drain | 16,000 | 5,500 | 284,000 | 53.77 |

| Drain Station | Drain System Length | Length Between Systems | Cumulative Distance from Mexico Border | Cumulative Distance from Mexico Border |
|-------------------------|---------------------|------------------------|--|--|
| | (ft) | (ft) | (ft) | (mi) |
| Cole Drain | 13,000 | 600 | 284,000 | 53.88 |
| Baughman Drain | 10,000 | 3,400 | 288,000 | 54.52 |
| Meserve Drain | 4,000 | 100 | 288,000 | 54.54 |
| Spruce 4 Drain | 4,000 | 7,900 | 296,000 | 56.04 |
| Raymond Drain | 10,000 | 200 | 296,000 | 56.07 |
| Spruce 6 Spill | 1,000 | 6,400 | 302,000 | 57.28 |
| Spruce Spill | 1,000 | 3,300 | 306,000 | 57.90 |
| Pinner Drain | 28,000 | 2,500 | 308,000 | 58.38 |
| Gerrard Drain | 15,000 | 100 | 308,000 | 58.40 |
| Tamarack Drain | 27,000 | 2,100 | 310,000 | 58.79 |
| Timothy 1 Drain | 22,000 | 600 | 311,000 | 58.90 |
| Riley 11 Pipeline Drain | 3,000 | 2,800 | 314,000 | 59.42 |
| Reed 13 Pipeline Drain | 3,000 | 0 | 314,000 | 59.42 |
| Timothy 2 Drain | 72,000 | 2,800 | 317,000 | 59.95 |
| Trifolium 3 Drain | 51,000 | 100 | 317,000 | 59.97 |
| Reed 15 Pipeline Drain | 3,000 | 2,600 | 319,000 | 60.46 |
| O'Brien Drain | 4,000 | 0 | 319,000 | 60.47 |
| Trifolium 4 Drain | 52,000 | 2,900 | 322,000 | 61.01 |
| Trifolium 6 Drain | 89,000 | 3,600 | 326,000 | 61.69 |
| Trifolium 6 Spill | 2,000 | 1,100 | 327,000 | 61.91 |
| Trifolium 7 Drain | 76,000 | 5,600 | 333,000 | 62.98 |
| Trifolium 8 Drain | 61,000 | 0 | 333,000 | 62.98 |
| O'Brien Spill | 2,000 | 1,600 | 334,000 | 63.28 |
| Thompson Drain | 2,000 | 3,300 | 337,000 | 63.92 |
| Trifolium 9 Drain | 66,000 | 100 | 338,000 | 63.94 |
| Vail Drain | 36,000 | 3,200 | 341,000 | 64.55 |
| Trifolium 10 Drain | 61,000 | 2,900 | 344,000 | 65.09 |
| Trifolium 11 Drain | 31,000 | 3,200 | 347,000 | 65.70 |
| Trifolium 12 Drain | 56,000 | 10,200 | 357,000 | 67.62 |
| New River at Salton Sea | - | 0 | 0 | - |

Appendix E: Historical Flow and Salt Contribution from Drains on the New River

| Drain Station | Cumulative Distance from Mexico Border | Flow from Drain | Cumulative Flow | Cumulative Flow | Cumulative Total Annual TDS |
|---------------------------|--|-----------------|-----------------|-----------------|-----------------------------|
| | (mi) | (acre-ft) | (acre-ft) | (cfs) | (mg/L) |
| New River at Border | 2.20 | 130,700 | 131,000 | 180 | 4,400 |
| All American Drain No 9 | 2.29 | 12,700 | 143,000 | 200 | 4,300 |
| All American Drain No 9 | 2.44 | 12,700 | 143,000 | 200 | 4,300 |
| All American Drain No 14 | 4.43 | 200 | 144,000 | 200 | 4,300 |
| Birch No 3 Pipeline Drain | 6.89 | 600 | 144,000 | 200 | 4,300 |
| Beech Spill | 8.47 | 500 | 145,000 | 200 | 4,300 |
| Beech Drain | 8.75 | 4,600 | 149,000 | 210 | 4,200 |
| Dahlia Spill | 11.79 | 500 | 150,000 | 210 | 4,200 |
| Elder Drain No 1 | 13.44 | 1,000 | 151,000 | 210 | 4,200 |
| Greeson Drain | 13.57 | 21,500 | 172,000 | 240 | 4,000 |
| Elder Drain No 3 Pipeline | 14.19 | 400 | 173,000 | 240 | 4,000 |
| Blue Lake Drain | 15.80 | 900 | 174,000 | 240 | 4,000 |
| Elder Spill | 17.35 | 300 | 174,000 | 240 | 4,000 |
| Wormwood 7 Drain | 18.41 | 2,500 | 176,000 | 240 | 4,000 |
| Fig Drain | 18.61 | 9,500 | 186,000 | 260 | 4,000 |
| Wixom Drain | 19.04 | 2,600 | 188,000 | 260 | 4,000 |
| Elder Lateral 7 Spill | 20.25 | 100 | 188,000 | 260 | 4,000 |
| Seeley Drain | 22.25 | 5,100 | 194,000 | 270 | 3,900 |
| Bullhead Slough | 25.20 | 4,300 | 198,000 | 270 | 3,900 |
| Elder 14 Drain | 26.91 | 4,800 | 203,000 | 280 | 3,900 |
| Salt Creek | 28.75 | 38,200 | 241,000 | 330 | 3,700 |
| Flax Drain | 32.17 | 15,300 | 256,000 | 350 | 3,700 |
| Fillaree Drain | 32.47 | 7,300 | 263,000 | 360 | 3,700 |
| Rice 3 Drain | 34.73 | 15,800 | 279,000 | 390 | 3,600 |
| Rice Drain | 37.55 | 5,100 | 284,000 | 390 | 3,600 |
| Sumac 1 Spill | 38.00 | 400 | 285,000 | 390 | 3,600 |
| Sumac Drain | 38.69 | 1,000 | 286,000 | 400 | 3,600 |
| North Central Drain | 39.17 | 4,100 | 290,000 | 400 | 3,600 |
| Sumac Drain No 2 | 39.91 | 800 | 290,000 | 400 | 3,600 |
| Cook Drain | 41.33 | 1,200 | 292,000 | 400 | 3,600 |
| Lilac 4 Spill | 43.08 | 400 | 292,000 | 400 | 3,600 |
| Malan Drain | 44.93 | 600 | 293,000 | 400 | 3,600 |
| Mansfield Tile Drain | 46.41 | 900 | 294,000 | 410 | 3,600 |
| Gardner Drain | 48.14 | 2,800 | 296,000 | 410 | 3,600 |
| Smilax Spill | 48.92 | 600 | 297,000 | 410 | 3,600 |
| Stanley Lateral 1 Spill | 49.26 | 200 | 297,000 | 410 | 3,600 |

| | | | | | |
|-------------------------|-------|--------|---------|-----|-------|
| Spruce 1 Drain | 49.80 | 1,000 | 298,000 | 410 | 3,600 |
| Spruce 3 Drain | 49.98 | 1,600 | 300,000 | 410 | 3,600 |
| Livesley Drain | 51.42 | 7,100 | 307,000 | 420 | 3,600 |
| Spruce Drain | 52.73 | 7,500 | 314,000 | 430 | 3,600 |
| Best Drain | 53.77 | 2,700 | 317,000 | 440 | 3,500 |
| Cole Drain | 53.88 | 2,200 | 319,000 | 440 | 3,500 |
| Baughman Drain | 54.52 | 1,800 | 321,000 | 440 | 3,500 |
| Meserve Drain | 54.54 | 700 | 322,000 | 440 | 3,500 |
| Spruce 4 Drain | 56.04 | 600 | 322,000 | 440 | 3,500 |
| Raymond Drain | 56.07 | 1,700 | 324,000 | 450 | 3,500 |
| Spruce 6 Spill | 57.28 | 200 | 324,000 | 450 | 3,500 |
| Spruce Spill | 57.90 | 200 | 325,000 | 450 | 3,500 |
| Pinner Drain | 58.38 | 4,900 | 330,000 | 460 | 3,500 |
| Gerrard Drain | 58.40 | 2,500 | 332,000 | 460 | 3,500 |
| Tamarack Drain | 58.79 | 4,700 | 337,000 | 470 | 3,500 |
| Timothy 1 Drain | 58.90 | 3,700 | 340,000 | 470 | 3,500 |
| Riley 11 Pipeline Drain | 59.42 | 400 | 341,000 | 470 | 3,500 |
| Reed 13 Pipeline Drain | 59.42 | 400 | 341,000 | 470 | 3,500 |
| Timothy 2 Drain | 59.95 | 11,900 | 353,000 | 490 | 3,500 |
| Trifolium 3 Drain | 59.97 | 8,800 | 362,000 | 500 | 3,500 |
| Reed 15 Pipeline Drain | 60.46 | 600 | 363,000 | 500 | 3,500 |
| O'Brien Drain | 60.47 | 700 | 363,000 | 500 | 3,500 |
| Trifolium 4 Drain | 61.01 | 8,900 | 372,000 | 510 | 3,500 |
| Trifolium 6 Drain | 61.69 | 15,300 | 387,000 | 530 | 3,400 |
| Trifolium 6 Spill | 61.91 | 300 | 388,000 | 540 | 3,400 |
| Trifolium 7 Drain | 62.98 | 13,100 | 401,000 | 550 | 3,400 |
| Trifolium 8 Drain | 62.98 | 10,400 | 411,000 | 570 | 3,400 |
| O'Brien Spill | 63.28 | 400 | 412,000 | 570 | 3,400 |
| Thompson Drain | 63.92 | 300 | 412,000 | 570 | 3,400 |
| Trifolium 9 Drain | 63.94 | 11,300 | 423,000 | 580 | 3,400 |
| Vail Drain | 64.55 | 6,200 | 429,000 | 590 | 3,400 |
| Trifolium 10 Drain | 65.09 | 9,200 | 439,000 | 610 | 3,400 |
| Trifolium 11 Drain | 65.70 | 3,100 | 442,000 | 610 | 3,400 |
| Trifolium 12 Drain | 67.62 | 4,800 | 446,000 | 620 | 3,400 |
| New River at Salton Sea | - | - | 446,000 | 620 | 3,400 |

Appendix F: Post QSA Flow and Salt Contribution from Drains on the New River

| Drain Station | Cumulative Distance from Mexico Border | Post QSA Drainage Flow | Post QSA Cumulative Flow | Post QSA Cumulative Flow | Post QSA Cumulative TDS |
|---------------------------|--|------------------------|--------------------------|--------------------------|-------------------------|
| | (mi) | (acre-ft) | (acre-ft) | (cfs) | (mg/L) |
| New River at Border | 2.20 | 130,700 | 131,000 | 180 | 4,400 |
| All American Drain No 9 | 2.29 | 8,900 | 140,000 | 190 | 4,400 |
| All American Drain No 9 | 2.44 | 8,900 | 140,000 | 190 | 4,600 |
| All American Drain No 14 | 4.43 | 100 | 140,000 | 190 | 4,600 |
| Birch No 3 Pipeline Drain | 6.89 | 400 | 140,000 | 190 | 4,600 |
| Beech Spill | 8.47 | 300 | 140,000 | 190 | 4,600 |
| Beech Drain | 8.75 | 3,200 | 144,000 | 200 | 4,600 |
| Dahlia Spill | 11.79 | 300 | 144,000 | 200 | 4,600 |
| Elder Drain No 1 | 13.44 | 700 | 145,000 | 200 | 4,600 |
| Greeson Drain | 13.57 | 15,000 | 160,000 | 220 | 4,500 |
| Elder Drain No 3 Pipeline | 14.19 | 300 | 160,000 | 220 | 4,500 |
| Blue Lake Drain | 15.80 | 700 | 161,000 | 220 | 4,500 |
| Elder Spill | 17.35 | 200 | 161,000 | 220 | 4,500 |
| Wormwood 7 Drain | 18.41 | 1,800 | 163,000 | 230 | 4,500 |
| Fig Drain | 18.61 | 6,600 | 169,000 | 230 | 4,500 |
| Wixom Drain | 19.04 | 1,800 | 171,000 | 240 | 4,400 |
| Elder Lateral 7 Spill | 20.25 | 0 | 171,000 | 240 | 4,400 |
| Seeley Drain | 22.25 | 3,500 | 175,000 | 240 | 4,400 |
| Bullhead Slough | 25.20 | 3,000 | 178,000 | 250 | 4,400 |
| Elder 14 Drain | 26.91 | 3,300 | 181,000 | 250 | 4,400 |
| Salt Creek | 28.75 | 26,800 | 208,000 | 290 | 4,300 |
| Flax Drain | 32.17 | 10,700 | 218,000 | 300 | 4,300 |
| Fillaree Drain | 32.47 | 5,100 | 224,000 | 310 | 4,300 |
| Rice 3 Drain | 34.73 | 11,000 | 235,000 | 320 | 4,300 |
| Rice Drain | 37.55 | 3,500 | 238,000 | 330 | 4,300 |
| Sumac 1 Spill | 38.00 | 300 | 238,000 | 330 | 4,300 |
| Sumac Drain | 38.69 | 700 | 239,000 | 330 | 4,300 |
| North Central Drain | 39.17 | 2,800 | 242,000 | 330 | 4,300 |
| Sumac Drain No 2 | 39.91 | 500 | 243,000 | 340 | 4,300 |
| Cook Drain | 41.33 | 900 | 243,000 | 340 | 4,300 |
| Lilac 4 Spill | 43.08 | 300 | 244,000 | 340 | 4,300 |
| Malan Drain | 44.93 | 400 | 244,000 | 340 | 4,300 |
| Mansfield Tile Drain | 46.41 | 600 | 245,000 | 340 | 4,300 |
| Gardner Drain | 48.14 | 2,000 | 247,000 | 340 | 4,200 |
| Smilax Spill | 48.92 | 400 | 247,000 | 340 | 4,200 |
| Stanley Lateral 1 Spill | 49.26 | 100 | 247,000 | 340 | 4,200 |
| Spruce 1 Drain | 49.80 | 700 | 248,000 | 340 | 4,200 |
| Spruce 3 Drain | 49.98 | 1,100 | 249,000 | 340 | 4,200 |
| Livesley Drain | 51.42 | 5,000 | 254,000 | 350 | 4,200 |
| Spruce Drain | 52.73 | 5,200 | 259,000 | 360 | 4,200 |
| Best Drain | 53.77 | 1,900 | 261,000 | 360 | 4,200 |
| Cole Drain | 53.88 | 1,500 | 263,000 | 360 | 4,200 |

| Drain Station | Cumulative Distance from Mexico Border | Post QSA Drainage Flow | Post QSA Cumulative Flow | Post QSA Cumulative Flow | Post QSA Cumulative TDS |
|-------------------------|--|------------------------|--------------------------|--------------------------|-------------------------|
| | (mi) | (acre-ft) | (acre-ft) | (cfs) | (mg/L) |
| Baughman Drain | 54.52 | 1,300 | 264,000 | 360 | 4,200 |
| Meserve Drain | 54.54 | 500 | 264,000 | 360 | 4,200 |
| Spruce 4 Drain | 56.04 | 500 | 265,000 | 370 | 4,200 |
| Raymond Drain | 56.07 | 1,200 | 266,000 | 370 | 4,200 |
| Spruce 6 Spill | 57.28 | 200 | 266,000 | 370 | 4,200 |
| Spruce Spill | 57.90 | 200 | 266,000 | 370 | 4,200 |
| Pinner Drain | 58.38 | 3,400 | 270,000 | 370 | 4,200 |
| Gerrard Drain | 58.40 | 1,800 | 272,000 | 380 | 4,200 |
| Tamarack Drain | 58.79 | 3,300 | 275,000 | 380 | 4,200 |
| Timothy 1 Drain | 58.90 | 2,600 | 277,000 | 380 | 4,200 |
| Riley 11 Pipeline Drain | 59.42 | 300 | 278,000 | 380 | 4,200 |
| Reed 13 Pipeline Drain | 59.42 | 300 | 278,000 | 380 | 4,200 |
| Timothy 2 Drain | 59.95 | 8,300 | 286,000 | 400 | 4,200 |
| Trifolium 3 Drain | 59.97 | 6,200 | 293,000 | 400 | 4,200 |
| Reed 15 Pipeline Drain | 60.46 | 400 | 293,000 | 400 | 4,200 |
| O'Brien Drain | 60.47 | 500 | 293,000 | 400 | 4,200 |
| Trifolium 4 Drain | 61.01 | 6,200 | 300,000 | 410 | 4,200 |
| Trifolium 6 Drain | 61.69 | 10,700 | 310,000 | 430 | 4,200 |
| Trifolium 6 Spill | 61.91 | 200 | 311,000 | 430 | 4,200 |
| Trifolium 7 Drain | 62.98 | 9,200 | 320,000 | 440 | 4,100 |
| Trifolium 8 Drain | 62.98 | 7,300 | 327,000 | 450 | 4,100 |
| O'Brien Spill | 63.28 | 300 | 327,000 | 450 | 4,100 |
| Thompson Drain | 63.92 | 200 | 328,000 | 450 | 4,100 |
| Trifolium 9 Drain | 63.94 | 7,900 | 336,000 | 460 | 4,100 |
| Vail Drain | 64.55 | 4,300 | 340,000 | 470 | 4,100 |
| Trifolium 10 Drain | 65.09 | 6,400 | 346,000 | 480 | 4,100 |
| Trifolium 11 Drain | 65.70 | 2,100 | 348,000 | 480 | 4,100 |
| Trifolium 12 Drain | 67.62 | 3,400 | 352,000 | 490 | 4,100 |
| New River at Salton Sea | - | - | 384,000 | 530 | 4,100 |

Appendix G –IID Current Active Metered Drains in the Water Information System

| Drain Name | Beginning Record |
|----------------------------|-------------------------|
| C Drain | 3/13/2007 |
| Central Drain Drop 2 | 1/1/1996 |
| Fig Drain | 1/1/1996 |
| Greeson Drain | 1/1/1996 |
| Holtville Main Drain | 1/1/1996 |
| I Drain | 1/28/2008 |
| Magnolia Drain | 3/13/2007 |
| Mayflower Drain | 6/2/1994 |
| Munyon Drain | 3/13/2007 |
| N Drain | 3/13/2007 |
| Narcissus Drain | 6/10/1994 |
| Nettle Drain | 2/6/2008 |
| Niland Drain 1 | 1/1/1996 |
| Niland Drain 2 | 1/1/1996 |
| Niland Drain 3 | 1/1/1996 |
| Niland Drain 4 | 1/1/1996 |
| Niland Drain 5 | 1/1/1996 |
| North Central Drain | 2/6/2008 |
| O Drain | 1/1/1996 |
| Oleander Drain | 3/13/2007 |
| P Drain | 1/1/1996 |
| Peach Drain | 2/7/2008 |
| Pumice Drain UFM | 3/19/2007 |
| Q Drain | 1/1/1996 |
| R Drain | 1/1/1996 |
| Rice 3 Drain | 1/1/1996 |
| Rice Drain | 1/1/1996 |
| Rose Drain Outlet | 1/1/1996 |
| S Drain | 1/1/1996 |
| South Central Drain Outlet | 1/1/1996 |
| Standard Drain | 5/4/1994 |
| T Drain | 1/1/1996 |
| Timothy 2 Drain | 1/28/2008 |
| Trifolium 10 Drain | 1/1/1996 |
| Trifolium 11 Drain | 1/1/1996 |
| Trifolium 12 Drain | 1/15/2008 |
| Trifolium 20 Drain | 7/6/1996 |
| Trifolium 20A Drain | 1/1/1996 |
| Trifolium Drain No. 1 | 1/1/1996 |
| U Drain | 1/1/1996 |
| Verde Drain Outlet | 1/1/1996 |
| W+Y Drain | 1/1/1996 |
| Z Drain | 1/1/1996 |

Appendix H: Average Monthly Flow for the Alamo River at the Salton Sea

| Alamo River | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-----------------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Historic (cfs) | Max | 820 | 860 | 1,290 | 1,220 | 1,100 | 910 | 940 | 930 | 1,110 | 1,200 | 860 | 790 |
| | Min | 310 | 410 | 830 | 820 | 810 | 760 | 880 | 750 | 640 | 720 | 420 | 560 |
| | Average | 650 | 560 | 1,000 | 1,090 | 950 | 820 | 900 | 820 | 840 | 950 | 700 | 670 |
| Historic (acre-ft/month) | Max | 50,000 | 48,000 | 79,000 | 73,000 | 68,000 | 54,000 | 58,000 | 57,000 | 66,000 | 74,000 | 51,000 | 49,000 |
| | Min | 19,000 | 23,000 | 51,000 | 49,000 | 49,000 | 45,000 | 54,000 | 46,000 | 38,000 | 44,000 | 25,000 | 34,000 |
| | Average | 40,000 | 31,000 | 61,000 | 65,000 | 58,000 | 49,000 | 55,000 | 51,000 | 50,000 | 58,000 | 41,000 | 41,000 |
| Post QSA (cfs) | Max | 570 | 600 | 900 | 850 | 770 | 640 | 660 | 650 | 780 | 840 | 600 | 550 |
| | Min | 210 | 290 | 580 | 580 | 560 | 530 | 620 | 520 | 440 | 500 | 290 | 390 |
| | Average | 450 | 390 | 700 | 760 | 660 | 580 | 630 | 580 | 590 | 660 | 490 | 470 |
| Post QSA (acre-ft/month) | Max | 35,000 | 33,000 | 56,000 | 51,000 | 47,000 | 38,000 | 41,000 | 40,000 | 46,000 | 52,000 | 36,000 | 34,000 |
| | Min | 13,000 | 16,000 | 36,000 | 34,000 | 35,000 | 32,000 | 38,000 | 32,000 | 26,000 | 31,000 | 17,000 | 24,000 |
| | Average | 28,000 | 22,000 | 43,000 | 45,000 | 41,000 | 34,000 | 39,000 | 35,000 | 35,000 | 41,000 | 29,000 | 29,000 |

Appendix I: Average Monthly Salinity for the Alamo River at Salton Sea

| Alamo River | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Historic (μ S/cm) | Max | 5,100 | 5,500 | 4,100 | 4,800 | 4,700 | 4,200 | 4,100 | 5,300 | 4,800 | 4,300 | 6,500 | 4,500 |
| | Min | 3,700 | 3,200 | 2,700 | 3,500 | 3,500 | 3,300 | 3,400 | 3,600 | 3,200 | 3,600 | 3,500 | 3,200 |
| | Average | 4,300 | 4,600 | 3,600 | 3,900 | 4,000 | 3,700 | 3,700 | 4,000 | 4,000 | 3,800 | 4,700 | 3,900 |
| Historic (mg/L) | Max | 3,300 | 3,500 | 2,600 | 3,100 | 3,000 | 2,700 | 2,600 | 3,400 | 3,000 | 2,800 | 4,100 | 2,900 |
| | Min | 2,300 | 2,000 | 1,700 | 2,200 | 2,200 | 2,100 | 2,100 | 2,300 | 2,100 | 2,300 | 2,200 | 2,000 |
| | Average | 2,700 | 3,000 | 2,300 | 2,500 | 2,600 | 2,400 | 2,400 | 2,600 | 2,600 | 2,400 | 3,000 | 2,500 |
| Historic (tons/month) | Max | 202,000 | 132,000 | 240,000 | 246,000 | 250,000 | 196,000 | 197,000 | 245,000 | 202,000 | 228,000 | 286,000 | 142,000 |
| | Min | 84,000 | 103,000 | 151,000 | 190,000 | 169,000 | 143,000 | 164,000 | 144,000 | 138,000 | 165,000 | 114,000 | 124,000 |
| | Average | 144,000 | 119,000 | 190,000 | 219,000 | 203,000 | 160,000 | 180,000 | 178,000 | 173,000 | 191,000 | 167,000 | 136,000 |
| Post QSA (μ S/cm) | Max | 6,600 | 7,100 | 5,200 | 6,100 | 6,000 | 5,300 | 5,300 | 6,800 | 6,100 | 5,500 | 8,300 | 5,700 |
| | Min | 4,700 | 4,100 | 3,400 | 4,400 | 4,500 | 4,300 | 4,300 | 4,600 | 4,100 | 4,600 | 4,500 | 4,100 |
| | Average | 5,500 | 6,000 | 4,600 | 5,100 | 5,100 | 4,800 | 4,800 | 5,200 | 5,200 | 4,900 | 6,000 | 5,000 |
| Post QSA (mg/L) | Max | 4,200 | 4,500 | 3,400 | 3,900 | 3,900 | 3,400 | 3,400 | 4,400 | 3,900 | 3,500 | 5,300 | 3,700 |
| | Min | 3,000 | 2,600 | 2,200 | 2,800 | 2,900 | 2,700 | 2,800 | 3,000 | 2,600 | 2,900 | 2,900 | 2,600 |
| | Average | 3,500 | 3,800 | 3,000 | 3,200 | 3,300 | 3,100 | 3,100 | 3,300 | 3,300 | 3,100 | 3,800 | 3,200 |
| Post QSA (tons/month) | Max | 181,000 | 119,000 | 216,000 | 222,000 | 225,000 | 176,000 | 177,000 | 221,000 | 182,000 | 205,000 | 257,000 | 127,000 |
| | Min | 75,000 | 93,000 | 136,000 | 171,000 | 152,000 | 129,000 | 148,000 | 130,000 | 124,000 | 149,000 | 103,000 | 112,000 |
| | Average | 130,000 | 107,000 | 171,000 | 197,000 | 182,000 | 144,000 | 162,000 | 160,000 | 155,000 | 172,000 | 150,000 | 123,000 |

Appendix J: Average Monthly Flow for the New River

| New River | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| at International Border (CFS) | Max | 350 | 350 | 380 | 250 | 370 | 220 | 480 | 390 | 450 | 270 | 350 | 200 |
| | Min | 130 | 150 | 140 | 170 | 140 | 100 | 110 | 110 | 120 | 100 | 60 | 100 |
| | Average | 200 | 190 | 200 | 200 | 220 | 150 | 210 | 170 | 200 | 140 | 160 | 140 |
| at International Border (acre-ft/month) | Max | 22,000 | 20,000 | 23,000 | 15,000 | 23,000 | 13,000 | 30,000 | 24,000 | 27,000 | 16,000 | 21,000 | 12,000 |
| | Min | 8,000 | 8,000 | 9,000 | 10,000 | 9,000 | 6,000 | 7,000 | 7,000 | 7,000 | 6,000 | 4,000 | 6,000 |
| | Average | 12,000 | 11,000 | 12,000 | 12,000 | 13,000 | 9,000 | 13,000 | 11,000 | 12,000 | 9,000 | 10,000 | 9,000 |
| Historic at Salton Sea (cfs) | Max | 550 | 570 | 760 | 810 | 750 | 620 | 780 | 700 | 770 | 670 | 540 | 540 |
| | Min | 390 | 440 | 610 | 630 | 590 | 480 | 550 | 480 | 460 | 430 | 390 | 400 |
| | Average | 480 | 490 | 660 | 730 | 660 | 560 | 620 | 560 | 600 | 580 | 480 | 480 |
| Historic at Salton Sea (acre-ft/month) | Max | 34,000 | 32,000 | 47,000 | 48,000 | 46,000 | 37,000 | 48,000 | 43,000 | 46,000 | 41,000 | 32,000 | 33,000 |
| | Min | 24,000 | 24,000 | 37,000 | 37,000 | 36,000 | 29,000 | 34,000 | 29,000 | 28,000 | 27,000 | 23,000 | 25,000 |
| | Average | 30,000 | 27,000 | 40,000 | 43,000 | 40,000 | 33,000 | 38,000 | 34,000 | 35,000 | 36,000 | 29,000 | 30,000 |
| Post-QSA at Salton Sea (cfs) | Max | 420 | 450 | 570 | 630 | 570 | 450 | 630 | 540 | 590 | 510 | 400 | 410 |
| | Min | 300 | 350 | 450 | 480 | 470 | 360 | 430 | 370 | 350 | 320 | 310 | 300 |
| | Average | 380 | 390 | 500 | 550 | 510 | 410 | 490 | 420 | 460 | 430 | 360 | 360 |
| Post QSA at Salton Sea (acre-ft/month) | Max | 26,000 | 25,000 | 35,000 | 37,000 | 35,000 | 27,000 | 39,000 | 33,000 | 35,000 | 31,000 | 24,000 | 25,000 |
| | Min | 19,000 | 19,000 | 28,000 | 28,000 | 29,000 | 21,000 | 26,000 | 23,000 | 21,000 | 20,000 | 18,000 | 19,000 |
| | Average | 23,000 | 22,000 | 31,000 | 33,000 | 31,000 | 25,000 | 30,000 | 26,000 | 27,000 | 26,000 | 21,000 | 22,000 |

Appendix K: Average Monthly Salinity for the New River

| New River | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Border ($\mu\text{S/cm}$) | Max | 7,500 | 9,600 | 8,300 | 8,500 | 8,100 | 8,700 | 8,500 | 8,600 | 8,600 | 7,500 | 10,300 | 10,700 |
| | Min | 5,400 | 6,200 | 4,800 | 6,600 | 5,900 | 4,600 | 4,200 | 6,300 | 4,400 | 5,800 | 5,400 | 5,200 |
| | Average | 6,500 | 7,300 | 6,900 | 7,300 | 7,100 | 7,300 | 6,900 | 7,200 | 6,700 | 6,600 | 6,900 | 7,200 |
| Border (mg/L) | Max | 4,800 | 6,200 | 5,300 | 5,400 | 5,200 | 5,600 | 5,500 | 5,500 | 5,500 | 4,800 | 6,600 | 6,800 |
| | Min | 3,400 | 4,000 | 3,000 | 4,200 | 3,800 | 2,900 | 2,700 | 4,000 | 2,800 | 3,700 | 3,500 | 3,300 |
| | Average | 4,200 | 4,700 | 4,400 | 4,700 | 4,500 | 4,700 | 4,400 | 4,600 | 4,300 | 4,200 | 4,400 | 4,600 |
| Border (tons/month) | Max | 101,000 | 71,000 | 114,000 | 95,000 | 117,000 | 80,000 | 129,000 | 171,000 | 112,000 | 83,000 | 109,000 | 73,000 |
| | Min | 49,000 | 49,000 | 48,000 | 64,000 | 55,000 | 40,000 | 49,000 | 43,000 | 41,000 | 33,000 | 35,000 | 36,000 |
| | Average | 68,000 | 61,000 | 74,000 | 76,000 | 81,000 | 54,000 | 72,000 | 68,000 | 64,000 | 50,000 | 61,000 | 53,000 |
| Historic at Salton Sea ($\mu\text{S/cm}$) | Max | 6,800 | 7,100 | 5,500 | 5,300 | 5,500 | 5,900 | 5,400 | 6,100 | 7,200 | 5,700 | 7,500 | 6,300 |
| | Min | 5,300 | 5,000 | 3,800 | 5,000 | 4,700 | 4,800 | 4,000 | 4,700 | 4,400 | 4,300 | 4,900 | 5,100 |
| | Average | 6,100 | 6,200 | 4,800 | 5,100 | 5,000 | 5,400 | 5,000 | 5,200 | 5,700 | 5,000 | 5,900 | 5,800 |
| Historic at Salton Sea (mg/L) | Max | 4,400 | 4,500 | 3,500 | 3,400 | 3,500 | 3,700 | 3,500 | 3,900 | 4,600 | 3,600 | 4,800 | 4,000 |
| | Min | 3,400 | 3,200 | 2,400 | 3,200 | 3,000 | 3,100 | 2,600 | 3,000 | 2,800 | 2,700 | 3,100 | 3,300 |
| | Average | 3,900 | 4,000 | 3,100 | 3,300 | 3,200 | 3,400 | 3,200 | 3,300 | 3,600 | 3,200 | 3,800 | 3,700 |
| Historic at Salton Sea (tons/month) | Max | 179,000 | 162,000 | 182,000 | 213,000 | 191,000 | 173,000 | 177,000 | 181,000 | 222,000 | 166,000 | 155,000 | 168,000 |
| | Min | 139,000 | 134,000 | 148,000 | 173,000 | 153,000 | 133,000 | 153,000 | 131,000 | 130,000 | 127,000 | 136,000 | 129,000 |
| | Average | 158,000 | 147,000 | 168,000 | 194,000 | 176,000 | 155,000 | 165,000 | 155,000 | 173,000 | 151,000 | 146,000 | 150,000 |
| Post-QSA at Salton Sea ($\mu\text{S/cm}$) | Max | 8,200 | 8,600 | 6,700 | 6,600 | 6,900 | 7,400 | 6,900 | 7,400 | 8,900 | 7,100 | 9,000 | 7,700 |
| | Min | 6,500 | 6,000 | 4,600 | 6,200 | 5,700 | 6,100 | 4,700 | 5,900 | 5,400 | 5,300 | 6,100 | 6,300 |
| | Average | 7,400 | 7,400 | 6,100 | 6,300 | 6,200 | 6,700 | 6,100 | 6,400 | 7,000 | 6,200 | 7,300 | 7,200 |
| Post-QSA at Salton Sea (mg/L) | Max | 5,200 | 5,500 | 4,300 | 4,200 | 4,400 | 4,700 | 4,400 | 4,800 | 5,700 | 4,500 | 5,800 | 4,900 |
| | Min | 4,200 | 3,900 | 3,000 | 4,000 | 3,700 | 3,900 | 3,000 | 3,800 | 3,400 | 3,400 | 3,900 | 4,000 |
| | Average | 4,800 | 4,800 | 3,900 | 4,100 | 4,000 | 4,300 | 3,900 | 4,100 | 4,500 | 4,000 | 4,700 | 4,600 |
| Post-QSA at Salton Sea (tons/month) | Max | 169,000 | 153,000 | 171,000 | 201,000 | 183,000 | 160,000 | 164,000 | 170,000 | 205,000 | 153,000 | 144,000 | 155,000 |
| | Min | 132,000 | 127,000 | 142,000 | 163,000 | 144,000 | 124,000 | 143,000 | 123,000 | 121,000 | 118,000 | 126,000 | 120,000 |
| | Average | 149,000 | 139,000 | 161,000 | 182,000 | 169,000 | 144,000 | 157,000 | 145,000 | 162,000 | 140,000 | 135,000 | 139,000 |