

# Preliminary Engineering Investigation of the Bunker Hill Basin 2010–2011



Prepared By:





# **Engineering Investigation Of the Bunker Hill Basin 2010-2011**

## **Groundwater Conditions in the San Bernardino Valley Water Conservation District**

**Preliminary**

March 4, 2011

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## Acknowledgments

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The District also wishes to thank the following agencies for providing data:

- San Bernardino Valley Municipal Water District
- City of Colton
- City of Loma Linda
- City of Redlands
- City of Rialto
- City of Riverside
- City of San Bernardino
- East Valley Water District
- San Bernardino County Department of Transportation and Flood Control
- Gage Canal Company
- West San Bernardino County Water District
- Western Municipal Water District
- United States Geological Survey, Santee, CA Office
- Watermaster Support Services, Steve Mains

As well as many other entities who document well water withdrawal and water level events throughout the year. Their coordinating efforts provide verified information and digital information to simplify management of production data more assessable for all use in the future.





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# Engineering Investigation of the Bunker Hill Basin 2010-2011

## Executive Summary





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## 1.0 Executive Summary

Article 1, Section 75560 of the California Water Code requires that a Water Conservation District that proposes to levy a groundwater charge “*... shall annually cause to be made an engineering investigation and report upon groundwater conditions of the District*”. In accordance with these requirements, the San Bernardino Valley Water Conservation District (District) must make the following findings and determinations as they relate to the ground and surface water conditions of the Bunker Hill Basin and those areas within the District boundary. Refer to **Figure 1** for locations.

- Task 1.** Annual change in storage for the Bunker Hill Basin for the preceding water year (July 2009 to June 2010);
- Task 2.** Accumulated change in storage of the Bunker Hill Basin as of the last day of the preceding water year (June 30, 2010);
- Task 3.** Total groundwater production from the Bunker Hill Basin for the preceding water year (July 1, 2009 - June 30, 2010);
- Task 4.** Estimate of the annual change in the Bunker Hill Basin storage for the current water year (July 1, 2010 - June 30, 2011);
- Task 5.** Estimate of the annual change in the Bunker Hill Basin storage for the ensuing water year (July 1, 2011 - June 30, 2012);
- Task 6.** Average annual change in Bunker Hill Basin storage for the immediate past ten water years (1998 - 2010);
- Task 7.** Estimated amount of agricultural water and other than agricultural water to be withdrawn from the groundwater supplies of the District for the ensuing water year (July 1, 2011 - June 30, 2012);
- Task 8.** Estimated amount of water necessary for surface distribution for the ensuing water year for the Bunker Hill Basin and the District (July 1, 2011 - June 30, 2012); and



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**Task 9.** The amount of water that is necessary for the replenishment of the groundwater supplies of the Bunker Hill Basin and the District for the ensuing water year (July 1, 2011 - June 30, 2012).

To make the findings and determinations listed above, District staff researched available hydro-geologic and engineering data for the Bunker Hill Basin. These data were compiled and analyzed and a predictive relationship between precipitation, production, and change in basin storage. This relationship was based on empirical data since 1993 and enables the prediction of change in storage, given certain annual production and precipitation levels. In addition, annual and accumulated change in storage values were calculated based on current and historic water level changes throughout the Bunker Hill Basin.

Based on 20 measuring stations, precipitation throughout the contributing watershed was 93% of normal for the period October 1, 2008 to September 31, 2009.

The required findings for the 2011 Engineering Investigation are provided below. Each of the tasks is further explained in the main body of the report. Throughout this document a positive sign (+) denotes an increase in groundwater storage or groundwater level elevation while a negative sign (-) denotes a decrease in groundwater storage or groundwater level elevation.

The Preliminary Draft contains estimated information for the Lytle Basin which the District expects to become available for the next Draft. The numbers highlighted in yellow are subject to change.



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## Summary of Findings for the 2011 Engineering Investigation

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- Task 1.** Annual change in storage for the Bunker Hill Basin for the preceding water year (July 1, 2009 to June 30, 2010 groundwater levels)

Change in storage between July 2009 and June 2010

**50,312**

**The amount of water stored in the Basin increased by 50,312 acre-feet between 2009 and 2010.**

- Task 2.** Accumulated change in storage of the Bunker Hill Basin as of the last day of the preceding water year (2010)

Accumulated change in storage between July 1993 and June 2010.<sup>1</sup>

**-347,288 acre-ft (decrease)**

**The amount in storage in the Summer of 2010 is 347,288 acre-ft less than in the Summer of 1993.**

- Task 3.** Total groundwater production from the Bunker Hill Basin for the preceding water year (July 1, 2009 - June 30, 2010)

**213,461 acre-ft**

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<sup>1</sup> In the District's Engineering Investigation (EI) prior to 1993-94, the accumulated change in storage was based on the basin storage in 1984 as considered full. A concern arose regarding the flooding of basements due to high groundwater levels in the Pressure Zone of the Bunker Hill Basin. Therefore, in response to the City of San Bernardino's comments on accumulated change in storage, all EI's since that time are based on 1993 basin storage levels considered as full.



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- Task 4.** Estimate of the annual change in the Bunker Hill Basin storage for the current water year (July 1, 2010 - June 30, 2011)

**-22,458 acre-ft (decrease)**

**The amount of water in the Basin is estimated to decrease by 22,458 acre- ft during the current water year.**

- Task 5.** Estimate of the annual change in the Bunker Hill Basin storage for the ensuing water year (July 1, 2011 - June 30, 2012)

**-19,158 acre-ft (decrease)**

**The amount of water in the Basin is estimated to decrease by 19,158 acre-ft during the ensuing water year.**

- Task 6.** Average annual change in Bunker Hill Basin storage for the immediate past 10 water years (2000-2010) shows a continual decrease, although less in magnitude than previous years:

**-16,842 acre-ft (decrease)**

- Task 7.** Estimated amount of agricultural water and other than agricultural water to be withdrawn from the groundwater supplies of the District for the ensuing water year (July 1, 2011 - June 30, 2012)

Estimated amount of agricultural water withdrawn from the groundwater supplies within the District boundary for the ensuing water year (July 1, 2011 - June 30, 2012)

**14,119 acre-ft**



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Estimated amount of other than agricultural water withdrawn from the groundwater supplies of the District for the ensuing water year (July 1, 2011 - June 30, 2012)

**46,064 acre-ft**

- Task 8.** Estimated amount of water necessary for surface distribution for the ensuing water year for the Bunker Hill Basin and the District (July 1, 2011 - June 30, 2012)

Estimated amount of water necessary for surface distribution for the ensuing water year (July 1, 2011 - June 30, 2012) for the Bunker Hill Basin

**80,452 acre-ft**

Estimated amount of water necessary for surface distribution for the ensuing water year (July 1, 2011 - June 30, 2012) within the District boundary

**68,040 acre-ft**

- Task 9.** The amount of water which is necessary for the replenishment of the groundwater supplies of the Bunker Hill Basin and the District for the ensuing water year (July 1, 2011 - June 30, 2012)

The amount of water which is necessary for the replenishment of the groundwater supplies of the Bunker Hill Basin for the ensuing water year (July 1, 2011 - June 30, 2012)

**162,067 acre-ft**



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The amount of water which is necessary for the replenishment of the groundwater supplies within the District boundary for the ensuing water year (July 1, 2011 - June 30, 2012)

**62,950 acre-ft**

In addition to the above findings, Section 75505 of the California Water Code requires that a finding be made as to the amount of water necessary to be replaced in the intake areas of the groundwater basins within the District to prevent the landward movement of salt water into the fresh groundwater body, or to prevent subsidence of the land within the District. Because of its location and the elevations of its water table, the Bunker Hill Basin is not subject to salt-water intrusion and the current groundwater levels do not indicate any significant land subsidence.

Section 75540 of the California Water Code requires that the District Board establish a zone or zones where a groundwater charge is to be implemented. The Code specifically states that a single zone may include the entire District and in May 1993 the Board established the entire District as one zone. This determination may be amended in the future, but lacking any evidence to the contrary, in the 2010-11 year the entire District will remain as a single zone in regard to any groundwater charge.

Section 75561 of the California Water Code further requires the Engineering Investigation to include a finding related to the amount of water the District is obligated by contract to purchase. At this time the District has no contractual obligation to purchase water for the replenishment of the groundwater supplies. However, instead cooperates with local and regional agencies to recharge the aquifer. The District works with San Bernardino Valley Municipal Water District (Valley) to spread excess allocation State Project Water in the District's spreading basins. In the past the District has utilized reserves to offset the cost of water purchases which have spread in its basins. Due to the significant reduction in District reserves it has not purchased water this year.



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**Based on the results of the 2009 Engineering Investigation, the San Bernardino Valley Water Conservation District finds that:**

- Due to the imbalance between groundwater recharge and production since 1993, the Bunker Hill Basin's storage is 406,900 acre-feet below that which is considered full for purposes of this investigation. This value is less than 2010 report due to local rainfall rates and management of the basin.
- During the ensuing water year (July 1, 2011 - June 30, 2012), the Bunker Hill Basin can be recharged, with up to 203,800 acre-feet of water. This recharge quantity is needed to maintain the 1993 storage level that is considered full. The Basin Technical Advisory Committee (BTAC) recommends a maximum of 125,000 acre-feet to safely manage and recharge the basin. This amount includes 68,000 acre-ft in Mill Creek and Santa Ana River Basins.
- The District must continue to take all necessary steps to maintain and enhance its capability to conduct recharge operations. These steps may include maintenance and repair of existing, diversion facilities, canals, dikes, basins, roads, and other water recharge facilities. These improvements are required to ensure that the increasing demands on the Basin, especially during drought periods, can be met.
- The District should continue to work cooperatively in the collaborative planning for the Enhanced Recharge Program to plan, design, build and maintain facilities to expand the capabilities for recharge of waters that are developed as a result of water conservation due to the construction of Seven Oaks Dam (SOD).
- The District has begun collaborative construction efforts with Valley to improve the capacities and delivery capabilities of the District's Upper Santa Ana River diverted water conveyance canals and spreading basins. The District should review the assumed single zone of influence/benefit in 2011-2012 and revise if needed.

Engineering  
Investigation

# Engineering Investigation of the Bunker Hill Basin 2010-2011

Engineering  
Investigation





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## **2.0 Introduction**

The 2010-2011 Engineering Investigation (EI) is being presented with a number of changes compared to previous EI Reports. The report uses as the basis of calculation the 2005-2006 Report however updates the document as proposed in the work plan prepared and circulated in November 2010. This approach also includes close coordination with other groups particularly San Bernardino Valley Municipal Water District (SBVMWD) who do their own calculations for elements of the EI Report. We believe this approach makes the best use of the resources of all water entities within the basin. This year's report provides more research, source documentation, and summary displaying of surface and groundwater activities within the Bunker Hill Basin and specifically within the Water Conservation District's boundaries compared to prior years.

Additional changes in this year's report include:

Additional explanation has been provided to support the conclusions in each section of the report. Additionally, background has been provided to assist with making the engineering terminology more understandable and clearer summaries of the results reported.

### **2.1 Purpose and Scope**

The San Bernardino Valley Water Conservation District (District) was created by a vote of the people in 1931 for the purpose of managing the recharge activities that were previously conducted by the Water Conservation Association. The Water Conservation Association was incorporated in 1909 and had been diverting flows from the Santa Ana River for groundwater recharge since 1911. Currently the District has ownership, as well as easements and/or use of properties owned by the Bureau of Land Management (BLM), on a total of 3,735 acres within the Santa Ana River and Mill Creek Wash areas. The District boundary covers an area of approximately 50,000 acres, which represents about 60% of the Bunker Hill Basin. **Figure 1** displays the project area map for the



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Engineering Investigation. It includes the District boundary along with its location relative to the County and State boundaries.

Article 1, Section 75560 of the California Water Code requires that a Water Conservation District that proposes to levy a groundwater charge "... shall annually cause to be made an engineering investigation and report upon groundwater conditions of the District". In accordance with these requirements, the San Bernardino Valley Water Conservation District (District) must make the following findings and determinations as they relate to the ground and surface water conditions of the Bunker Hill Basin and those areas within the District boundary.



- 
- Task 1.** Annual change in storage for the Bunker Hill Basin for the preceding water year (Fall 2009 to Fall 2010);
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- Task 3.** Total groundwater production from the Bunker Hill Basin for the preceding water year (July 1, 2009 - June 30, 2010);
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- Task 5.** Estimate of the annual change in the Bunker Hill Basin storage for the ensuing water year (July 1, 2011 - June 30, 2012);
- Task 6.** Average annual change in Bunker Hill Basin storage for the immediate past 10 water years (2000-2010);
- Task 7.** Estimated amount of agricultural water and other than agricultural water to be withdrawn from the groundwater supplies of the District for the ensuing water year (July 1, 2011 - June 30, 2012);
- Task 8.** Estimated amount of water necessary for surface distribution for the ensuing water year for the Bunker Hill Basin and the District (July 1, 2011 - June 30, 2012); and
- Task 9.** The amount of water that is necessary for the replenishment of the groundwater supplies of the Bunker Hill Basin and the District for the ensuing water year (July 1, 2011 - June 30, 2012).

To make the findings and determinations listed above, District staff researched available hydrogeologic, precipitation, and engineering data for the Bunker Hill Basin and surrounding areas. These data were compiled and analyzed and a predictive relationship between precipitation, production, and change in basin storage was adapted from similar relationships developed by Geoscience Support Services in the preparation of previous Engineering Investigations. This relationship was based on empirical data enables the prediction of change in storage, given certain annual production and precipitation levels. In addition, annual and accumulated change in storage was calculated based on historic water level changes throughout the Bunker Hill Basin.



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## **2.2 Location, Topography and Climate**

The Bunker Hill Basin is located at the top of the Santa Ana River Watershed and receives all the surface water runoff from the headwaters of the Santa Ana River, Mill Creek, and a portion of that from the Lytle Creek area as well as smaller periodic flows from Plunge, City, Devil Canyon, Cajon and Elder Creeks. It is part of the inland valley called the San Bernardino Valley located in San Bernardino County, California and encompasses approximately 89,600 acres. Once past the Bunker Hill Basin, the Santa Ana River continues to flow southwesterly for approximately 60 miles until it reaches the Pacific Ocean.

The Bunker Hill Basin is bounded on the northwest by the San Gabriel Mountains, on the northeast by the San Bernardino Mountains, on the south by the Crafton Hills and the Badlands, and on the southwest by a low east-facing escarpment produced by the San Jacinto fault. These geologic features are easily identified on **Figure 2**.

The major streams providing inflows and outflows for the Bunker Hill Basin are also provided on **Figure 2**. The United States Geological Survey (USGS) administers stream flow gauging stations on all of these waterways except Mill Creek. Mill Creek flow is assumed to be 56% of the Santa Ana River flow based on historic data. Total diversions for direct use and recharge on the Santa Ana River may exceed the stream flows due to measurements by different agencies.

The Bunker Hill Basin is also expressed by a large group of City and Water Agencies that are working to increasingly collaborate for improved transparency. **Figure 3** presents an overview of the Water Agency Jurisdictions with an overlay of City boundaries.

The climate in the region is a semi-arid Mediterranean-type characterized by long dry summers and relatively short mild winters. The annual average temperature in the valley is 62° F, with extremes ranging from as low as 18° F to as high as 116° F (Burnham and Dutcher, 1960). Precipitation in the region is highly variable depending on location and elevation. Historical annual averages range from 11 inches near Loma



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Linda Fire Department located at the southwest end of the basin to over 41 inches at the Lake Arrowhead located at the upper end of the mountain watershed contributing flow to the basin. Precipitation data provided by the Water Resources Division for 21 stations are summarized in **Table 1** and displayed on **Figure 4**.

### **2.3 Definition of Terms**

For the purposes of this report, the following terms are defined:

- ◆ Bunker Hill Basin - The Bunker Hill Basin is the groundwater basin that underlies the San Bernardino Valley. By strict definition according to (Dutcher and Garrett, 1963), the Bunker Hill Basin is separate from the Lytle Groundwater Basin, but receives groundwater underflow from the Lytle Basin. However, for completeness, the definition of the Bunker Hill Basin is extended to include the Lytle Basin for the purposes of this report.
- ◆ Production - The term production includes extraction of water by groundwater pumping from wells and surface diversions from the Santa Ana River, Mill Creek, City Creek, Devil Canyon Creek, Cajon Creek, Plunge Creek, and Lytle Creek.
- ◆ Preceding Water Year - As per the California Water Code, the preceding water year is the period July 1, 2009 through June 30, 2010.
- ◆ Current Water Year - As per the California Water Code, the current water year is the period July 1, 2010 through June 30, 2011.
- ◆ Ensuing Water Year - As per the California Water Code, the ensuing water year is the period July 1, 2011 through June 30, 2012.



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## **2.4 Sources of Data**

Data used in the development of this engineering investigation were obtained from a variety of sources including public and private agencies. The data analysis tasks involved tabulating and summarizing information from documented and undocumented reports, public and private files, and personal communication with local, State, and Federal agencies. Some of the more important data sources are listed below.

Data for Fall 2009 and Fall 2010 groundwater elevations and preceding water year (July 2009 to June 2010) production were obtained from the primary water purveyors in the Bunker Hill Basin including:

- City of Colton
- City of Loma Linda
- City of Redlands
- City of Rialto
- City of Riverside
- City of San Bernardino
- East Valley Water District
- Elsinore Valley Municipal Water District/Meeks and Daley Water Company
- Gage Canal Company
- Riverside – Highland Water Company
- San Bernardino County Department of Transportation and Flood Control
- San Bernardino Valley Municipal Water District
- Watermaster Support Services, Steve E. Mains
- West Valley Water District
- United States Geological Survey, Santee, CA Office



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Data regarding historic diversions from the Santa Ana River, Mill Creek, Plunge Creek, City Creek, Devil Canyon Creek, Cajon Creek, and Lytle Creek were obtained from the following sources:

- San Bernardino Valley Water Conservation District (acting as Project Manager for the Cooperative Water Project - Exchange Plan)
- Western Municipal Water District
- City of San Bernardino

Historic precipitation data were obtained from the following sources:

- San Bernardino County Department of Transportation and Flood Control
- Redlands Daily Facts
- Big Bear Grizzly

Current precipitation data is downloaded from USGS stations.



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### **3.0 Fall 2009 Groundwater Elevation Contours**

The District, the Western Municipal Water District, and the primary water purveyors in the Bunker Hill Basin provided Fall 2009 and 2010 water level data. Static groundwater elevations for wells throughout the Bunker Hill Basin are compiled in **Appendix A**. These elevations were plotted for 182 wells using a Geographic Information System (GIS) are plotted in **Figures 5 & 6** for Fall 2009 and Fall 2010. The water elevation values were used to derive an interpolated surface for the extent of the Bunker Hill Basin. For purposes of comparison, Fall 2009 and Fall 2010 static groundwater elevation surface contours are provided in **Figures 6 & 8** Fall 2009 and Fall 2010.

### **4.0 Task 1 - Annual Change in Storage (Fall 2009 to Fall 2010)**

#### **4.1 Hydrologic Sub-areas**

Using a Geographic Information System, the average groundwater elevation changes were determined for each of the eight hydrologic sub-areas shown in **Figure 2** and listed below.

- Bunker Hill I - Southwest of Interstate 215
- Bunker Hill I - Northeast of Interstate 215
- Bunker Hill II - West of Mentone Fault
- Bunker Hill II - East of Mentone Fault
- Lytle Basin - Southeast of Barrier J
- Lytle Basin - Northwest of Barrier J
- Pressure Zone - North of Santa Ana Wash
- Pressure Zone - Santa Ana Wash

Due to variations of changes in groundwater level elevation, the Bunker Hill II - East of Mentone Fault was further subdivided into Storage Units North of Redlands Fault and Southeast of Redlands Fault. These Storage Units are also shown in **Figure 6**.



## 4.2 Area and Storativity

Digitizing each polygon made estimates of the area extent of the sub-areas and storage. Average storativity for each sub-area was determined based on data from Hardt and Hutchinson, 1980. Both of these values are shown in **Table 3**. Storativity values ranged from 0.02 for the Pressure Zone - North of the Santa Ana Wash to 0.13 for the Lytle Basin - Northwest of Barrier J and Bunker Hill II - East of the Mentone Fault.

## 4.3 Groundwater Level Elevation Changes

In order to determine the annual change in storage for the Bunker Hill Basin, Fall 2010 groundwater level elevation data were compared with the same from Fall 2009. Measurements for 210 wells were available for both periods and the differences are provided in **Appendix A**.

Average changes in groundwater were determined by averaging the changes for all wells in each of the eight sub-areas and storage units as shown in **Table 3**.

## 4.4 Change in Groundwater Storage

The total annual change in storage for the Bunker Hill Basin was determined by summing the changes from each sub-area. Changes in groundwater storage for the period Fall 2009 to Fall 2010 for the Bunker Hill Basin were calculated using the following formula:

$$Q_{\text{change in storage}} = \sum A_i \times S_i \times \Delta h_i$$

where:

$Q_{\text{change in storage}}$  = Annual change in storage for the Bunker Hill Basin, (acre-feet)

$A_i$  = Area of sub-area and storage unit  $i$ , (acres)

$S_i$  = Storativity of sub-area and storage unit  $i$

$\Delta h_i$  = Average water level change of sub-area and storage unit  $i$ , (feet)



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As shown in **Table 3**, the change in groundwater storage for the Bunker Hill Basin between Fall 2009 and Fall 2010 was a increased of 50,312 acre-ft.

## 5.0 **Task 2 - Accumulated Change in Storage from Fall 1993 to Fall 2010**

For purposes of this report, the accumulated change in storage as of the last day of the preceding water year (September 30, 2010) was based on the changes in water levels between Fall 1993, when the accumulated basin change in storage was considered “zero”, and the Fall of 2010.<sup>2</sup> The accumulated change in storage as of June 30, 2010 was determined by adding the change in storage for the preceding water year (July 1, 2010 to June 30, 2011) of 50,312 determined in Section 4.4, to the accumulated change in storage as of June 30, 2009 (-397,600). The result of this calculation is an accumulated decrease in storage for the Bunker Hill Basin of 347,288 acre-ft.

**Table 4** summarizes the accumulated change in storage of the Bunker Hill Basin for the period 1988 to 2009 based on 1993 as the “zero accumulated storage year”. As would be expected, storage generally increases with above average rainfall and decreases with normal and below average rainfall.

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<sup>2</sup> In the District's Engineering Investigation (EI) prior to 1993-94, the accumulated change in storage was based on the basin storage in 1984 as considered full. A concern arose regarding the flooding of basements due to high groundwater levels in the Pressure Zone of the Bunker Hill Basin. Therefore, in response to the City of San Bernardino's comments on accumulated change in storage, all EI's since that time are based on 1993 basin storage levels considered as full.



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## 6.0 **Task 3 - Total Groundwater Production for the Preceding Water Year (July 1, 2009 to June 30, 2010)**

Production data for the preceding water year (July 1, 2009 to June 30, 2010) for the Bunker Hill Basin were obtained from the primary water purveyors as listed in Section 2.4. Production data for wells owned by some smaller water agencies were included if data was available from the Western-San Bernardino Watermaster, Western Municipal Water District and semiannual billing statements issued by the District.

**Appendix C** shows the production for each groundwater well in the Bunker Hill Basin for the period July 2009 through June 2010. As summarized on the last page of the Appendix, groundwater production from the Bunker Hill Basin for the preceding water year was approximately 213,461 acre-ft. **Table 5** summarizes the Bunker Hill Basin groundwater production for each of the sub-areas defined in Section 4.1.

Groundwater production within the Bunker Hill Basin during the period October 2008 through September 2009 is shown on **Figure 9**. The Pressure Zone has the greatest density of higher producing facilities with pockets of substantial production scattered throughout the rest of the basin. **Figure 9** depicts the monthly groundwater production values for each subbasin using the average of 273 wells.



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## 7.0 **Task 4 - Estimate of the Annual Change in Storage for the Current Water Year (July 1, 2010 to June 30, 2011)**

To estimate annual change in storage for the current water year, a multiple regression analysis was performed for the period between 1991-92 and 2004-05 for three parameters.

- Annual Change in Storage
- Precipitation
- Production

In Engineering Investigations (EI) prior to 1998, data for the period 1982 calendar year through 1991 calendar year were also utilized in the regression analysis. The only production data available for this time frame was based on a calendar year period instead of the June to July period required in the EI. Since the 1991-92 period, more accurate and more complete production data for the July to June period has become available, as the District has compiled detailed information for its EI. Since 1998, the regression analysis has not included pre-1991 data to more accurately represent June through July production.

Annual change in storage for the current water year is estimated using the following relationship between change in storage, precipitation, production, and the calculated regression coefficients. The accumulated change in storage is shown in **Figure 10**.



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A nomograph, constructed using the above equation, is shown on **Figure 9**. Through the use of this chart or the equation above, annual change in storage can be estimated for a given set of annual precipitation and production values. The precipitation used in the nomograph is based on the average of the representative Bunker Hill Basin drainage area stations listed in **Table 6**. The historic annual precipitation information is show in **Table 1**.

The average annual precipitation for eight of the ten stations with recent data is shown in **Table 6** approximately 20.8 inches, while the total for the preceding water year was 22.5 inches (107 percent of normal). Historic annual precipitation values are plotted in **Appendix D** for these eight stations and twelve other local stations.

**Table 6** shows that for the period between July 1, 2009 and December 31, 2009, precipitation was 80 percent of normal for the eight stations with data. Remainder of the water year, January 1 to June 30, 2010, the rainfall averaged 105% of the long term average. Annually, precipitation for the 2009-10 water year averaged 98%. For purposes of this report, it was assumed that precipitation for the current water year (July 1, 2011 to June 30, 2012) would be average the current water year compared to normal or 20.4 inches. Therefore, precipitation for the ensuing water year (July 1, 2011 to June 30, 2012) was estimated to be 100 percent of normal or 21.1 inches of rainfall.

Based on these assumptions, the estimated production for the current water year will be approximately 223,565 acre-ft as shown in **Figure 10**. Using this result in **Figure 9** an estimated change in storage for the current water year (July 2010 to June 2011) of 22,458 acre-ft was determined.

## **8.0 Task 5 - Estimate of the Annual Change in Storage for the Ensuing Water Year (July 1, 2011 to June 30, 2012)**

The annual change in storage for the ensuing water year (July 1, 2011 to June 30, 2012) was estimated using the same method as described in Section 7.0. It was assumed that precipitation for the ensuing water year would be 100% of normal or 20.8 inches. Based on this assumption, the estimated production for the ensuing water year will be



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approximately 223,361 acre-ft as shown in **Figure 11**. Again, using this result in the nomograph shown in **Figure 9**, the estimated annual change in storage for the ensuing water year (July 1, 2011 to June 30, 2012) is -19,158 acre-ft.

## **9.0 Task 6 - Average Annual Change in Storage for the Immediate Past 10 Water Years**

**Table 7** shows the average annual change in storage for the immediate past ten water years (July 2000 to June 2010) using the same method as described in Section 4.0. By summing the average annual change in storage for each sub-area, a total average annual change in storage for the Bunker Hill Basin for the immediate past ten water years was determined to be -16,842 acre-feet/year.

## **10.0 Task 7 - Estimated Amount of Agricultural Water and Other Than Agricultural Water to be Withdrawn for the Ensuing Water Year (July 1, 2011 to June 30, 2012)**

The estimated amount of agricultural water and other than agricultural water to be withdrawn within the District for the ensuing water year (July 1, 2011 to June 30, 2012) was based on the following equations:



$$Q_{agr(09-10)} = Q_{agr(09-10)} \times [(Q_{total(11-12)} - Q_{surf(11-12)}) / (Q_{total(09-10)} - Q_{surf(09-10)})]$$

and

$$Q_{non-agr(09-10)} = Q_{non-agr(09-10)} \times [(Q_{total(11-12)} - Q_{surf(11-12)}) / (Q_{total(09-10)} - Q_{surf(09-10)})]$$

where:

- $Q_{agr(11-12)}$  = Agricultural use within the District for the ensuing water year, acre-ft  
 $Q_{agr(09-10)}$  = Agricultural use within the District for the preceding water year, acre-ft (Appendix C)  
 $Q_{total(11-12)}$  = Production (including surface diversion) from the Bunker Hill Basin for the ensuing water year, acre-ft (Figure 13)  
 $Q_{total(09-10)}$  = Production (including surface diversion) from the Bunker Hill Basin for the preceding water year, acre-ft (Appendix C)  
 $Q_{non-agr(11-12)}$  = All other uses within the District for the ensuing water year, acre-ft  
 $Q_{non-agr(09-10)}$  = All other uses within the District for the preceding water year, acre-ft (Appendix C)  
 $Q_{surf(11-12)}$  = Surface diversions from the Bunker Hill Basin for the ensuing water year, acre-ft (Table 8)  
 $Q_{surf(09-10)}$  = Surface diversions from the Bunker Hill Basin for the preceding water year, acre-ft (Appendix C)

Data on agricultural use and other uses within the District for the preceding water year (July 1, 2009 to June 30, 2010) are provided in **Appendix C**. For the period July 1, 2009 through June 30, 2010 approximately 14,119 acre-ft of groundwater was produced for agricultural applications within the District boundary. For the same period, approximately 46,064 acre-ft of groundwater was produced for all other uses within the District boundary. Using the equations presented above with the following values inserted:



$$\begin{aligned} Q_{agr(09-10)} &= 14,119 \text{ acre-ft (Appendix C)} \\ Q_{total(11-12)} &= 223,361 \text{ acre-ft (Figure 13)} \\ Q_{total(09-10)} &= 293,913 \text{ acre-ft (Appendix C)} \\ Q_{non-agr(09-10)} &= 46,064 \text{ acre-ft (Appendix C)} \\ Q_{surf(11-12)} &= 68,040 \text{ acre-ft (Task 8)} \\ Q_{surf(09-10)} &= 80,452 \text{ acre-ft (Table 8)} \end{aligned}$$

The estimated production within the District for the ensuing water year for agricultural uses and other than agricultural uses is:

$$\begin{aligned} Q_{agr(11-12)} &= 14,119 \times [(223,361 - 68,040) / (293,913 - 80,452)] \\ &= 10,274 \text{ acre-ft} \\ Q_{non-agr(11-12)} &= 46,046 \times [(223,361 - 68,040) / (293,913 - 80,452)] \\ &= 33,518 \text{ acre-ft} \\ Q_{agr(11-12)} &= 10,274 \text{ acre-ft} \\ Q_{non-agr(11-12)} &= 33,518 \\ Q_{Dist(11-12)} &= 43,791 \end{aligned}$$

By summing these two results, it is estimated that 43,791 acre-feet of groundwater will be withdrawn within the District for the ensuing water year (July 1, 2010 to June 30, 2011). **Appendix C** shows the Agriculture and Non-Agriculture trends for the District by subbasin using approximately 273 wells within the District Boundary reporting type of use.



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## **11.0 Task 8 - Estimated Amount of Water for Surface Distribution for the Ensuing Water Year (July 1, 2011 to June 30, 2012)**

The amount of water for surface distribution for the ensuing water year (July 1, 2011 to June 30, 2012) was estimated based on the average surface diversions for the Santa Ana River, Mill Creek, and Lytle Creek for the period 1985 to 2010.

As shown in **Table 8**, average surface diversions for the Santa Ana River, Mill Creek, Lytle Creek and smaller tributary creeks collectively called “Bunker Hill Creeks,” between 1985 and 2010 were 39,616, 28,424, 11,771 and 641 acre-feet, respectively. Therefore, the total estimated amount of water for surface distribution from the Bunker Hill Basin for the ensuing water year (July 1, 2011 to June 30, 2012) is found by summing the diversions as follows:

$$\text{Bunker Hill Surface Distribution} = 39,616 + 28,424 + 11,771 = 80,452 \text{ acre-ft}$$

As Lytle Creek and Bunker Hill Creeks are not within the District, the estimated amount of surface distribution from the District for the ensuing water year (July 1, 2011 to June 30, 2012) is the sum of the Santa Ana River and Mill Creek distributions.

$$\text{District Surface Distribution} = 39,616 + 28,424 = 68,040 \text{ acre-ft}$$

## **12.0 Task 9 - Estimated Amount of Water for Replenishment of the Groundwater Supplies for the Ensuing Water Year (July 1, 2011 to June 30, 2012)**

The amount of water necessary for replenishment of the groundwater supplies of the Bunker Hill Basin for the ensuing water year (July 1, 2011 to June 30, 2012) was estimated based on:

$$\text{Replenishment} = \text{Total Production} - \text{Surface Diversions} - \text{Change in Storage}$$



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The estimated production and surface diversions from the Bunker Hill Basin for the ensuing water year (July 1, 2011 to June 30, 2012) were estimated as approximately 223,361 acre-feet (from **Figure 11**) and 80,452 acre-feet (from **Table 8**), respectively. The estimated change in storage determined in Section 8.0 and shown on **Figure 9** is a decrease of 19,158 acre-feet. Therefore, the amount of water necessary for replenishment of the groundwater supplies of the Bunker Hill Basin is estimated as follows:

$$\text{Replenishment} = 223,361 - 80,452 + 19,158 = 162,067 \text{ acre-ft}$$

The amount of water necessary for replenishment of the District's groundwater supplies for the ensuing water year (July 1, 2011 to June 30, 2012) was estimated using the same equation as shown above and substituting values for the District area. The estimated production within the District for the ensuing water year was estimated as approximately 43,791 acre-ft (from Section 10.0) and 68,040 acre-ft (from Section 11.0), respectively. The change in storage for the ensuing water year for the District was estimated as a decrease of 19,158 acre-ft (assumed to be half of the Bunker Hill Basin). Therefore, the amount of water necessary for replenishment of the District's groundwater supplies for the ensuing water year (July 1, 2011 to June 30, 2012) is:

$$\text{Replenishment} = \text{Total Production} - \text{Surface Diversions} - \text{Change in Storage}$$

$$\text{Replenishment} = (43,791 + 68,040) - 68,040 + 19,158 = 62,950 \text{ acre-ft}$$

## **13.0 General Findings**

In addition to the above findings, Section 75505 of the California Water Code requires that a finding be made as to the amount of water necessary to be replaced in the intake areas of the groundwater basins within the District to prevent the landward movement of salt water into the fresh groundwater body, or to prevent subsidence of the land within the District. Because of its location and the elevations of its water table, the Bunker Hill Basin is not subject to salt-water intrusion and the current groundwater levels will not (lowest=985 msl) result in any significant land subsidence.



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Section 75540 of the California Water Code requires that the District Board establish a zone or zones where a groundwater charge is to be implemented. The Code specifically states that a single zone may include the entire District and in May 1993 the Board established the entire District as one zone. This determination may be amended in the future, but lacking any evidence to the contrary, in the 2009-10 year the entire District will remain as a single zone in regard to any groundwater charge.

Section 75561 of the California Water Code further requires the Engineering Investigation to include a finding related to the amount of water the District is obligated by contract to purchase. At this time the District has no contractual obligation to purchase water for the replenishment of the groundwater supplies.

## **14.0 Conclusions**

Based on the results of the 2011 Engineering Investigation, the San Bernardino Valley Water Conservation District finds that:

- Due to the imbalance between recharge and production since 1993, the Bunker Hill Basin's storage is 397,600 acre-feet below that which is considered full for purposes of this Investigation.
- During the ensuing water year (July 1, 2011 to June 30, 2012), the Bunker Hill Basin can be recharged, from all sources, with 531,813 acre-feet of water. This recharge quantity is derived by algebraically adding together the accumulated deficit as of the end of the preceding water year with the estimated quantity needed to maintain the 1993 storage level considered full.
- The District should continue to take the necessary steps to work with its partners to enhance its capability to conduct recharge operations, which includes construction of new, or maintenance and repair of existing, diversion facilities, canals, dikes, basins, roads, and other water recharge facilities. These



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improvements are required to ensure that the increasing demands on the Basin, especially during drought periods, can be met.

## **15.0 Financial Data**

The San Bernardino Valley Water Conservation District, in response to questions previously provided information about the groundwater charge in this section. The District will provide a complete budget as a companion document to this report.

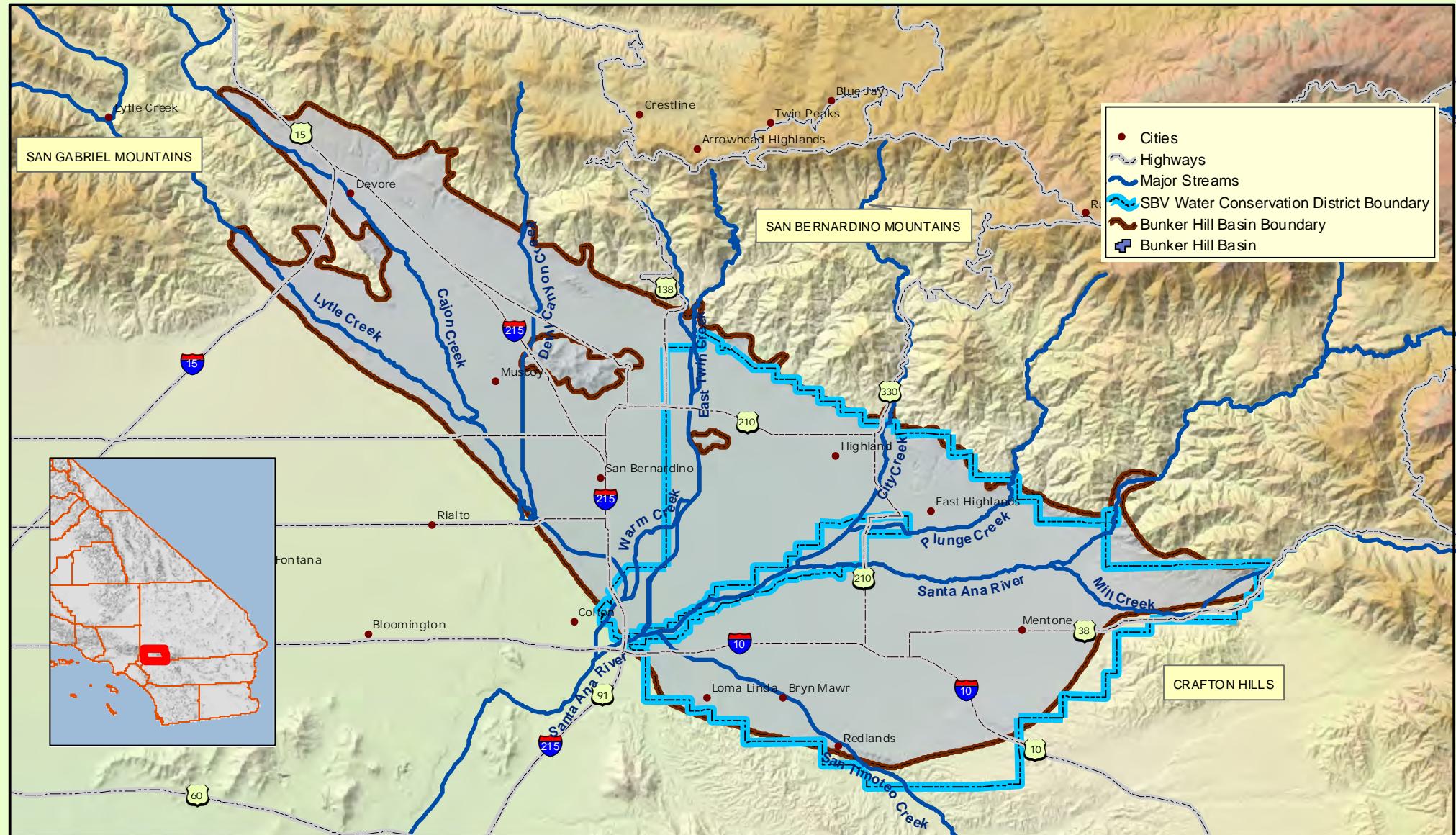
Any changes to the groundwater charge will not be reflected on the District's financial reports as income until the fiscal year 2011 – 2012, as the first increment of the new charge is not billed until then.

# **Engineering Investigation of the Bunker Hill Basin 2010-2011**

## **Figures**

**Figures**





State Plane  
NAD 83, Zone V, feet  
10M DEM DWR  
Data Sources:  
SBWVCD, CASIL, SBVMWD



0 0.45 0.9 1.8 2.7 Miles

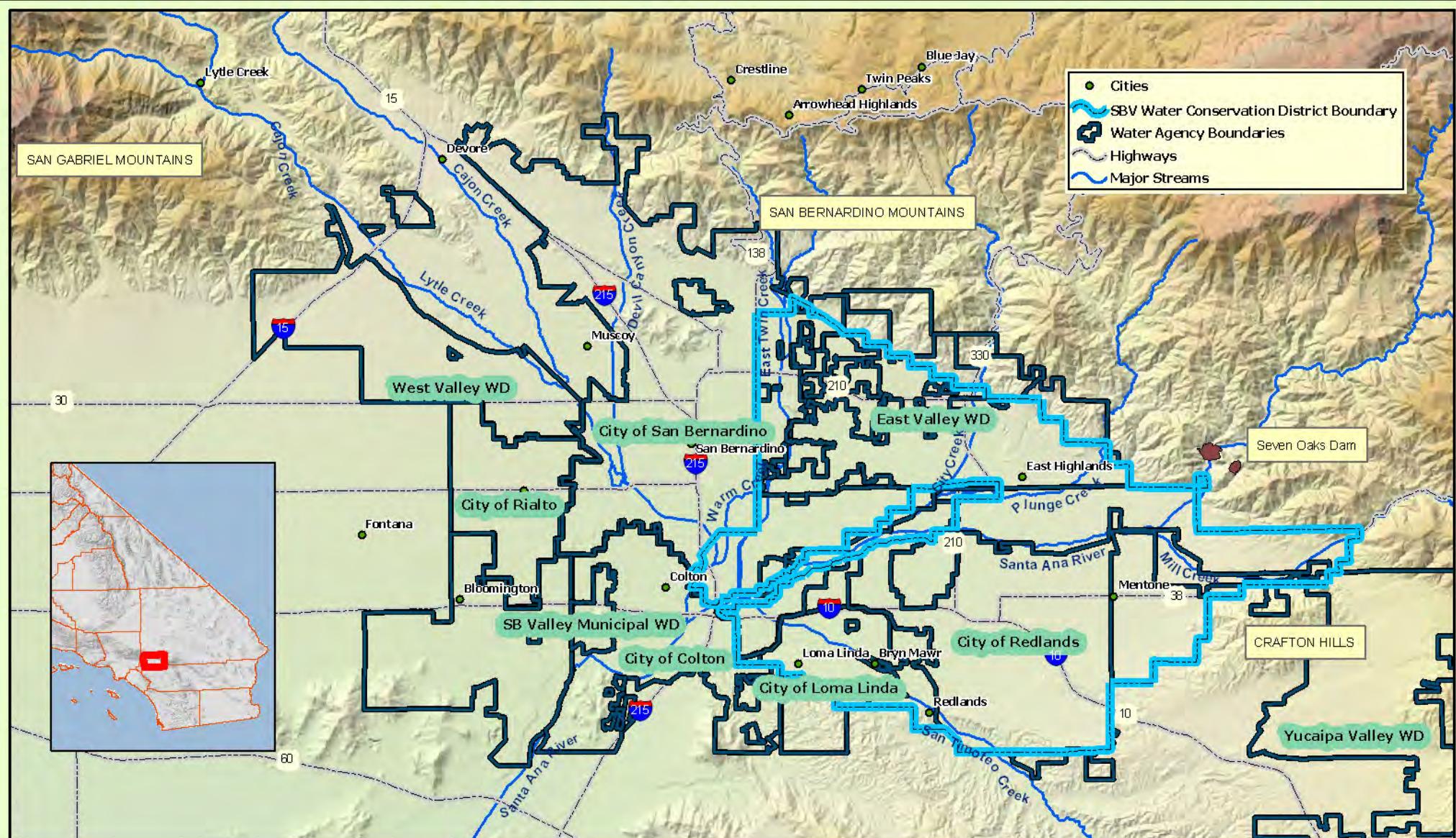
## Project Area 2009 - 2010 Engineering Investigation Report

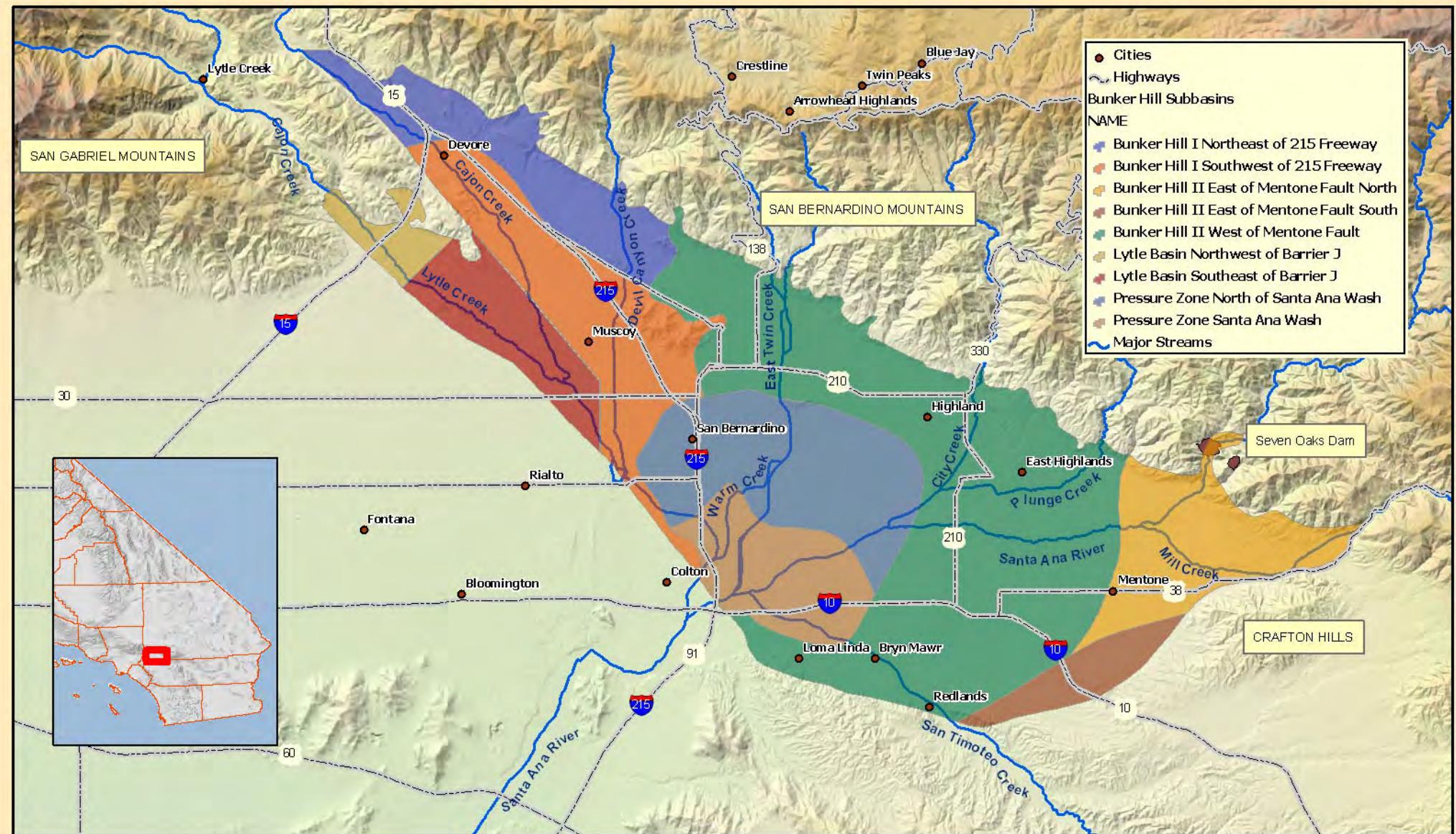
Engineering Investigation  
March 2011

Source: SBWVCD GIS  
L. Pierce



**Figure 1**





State Plane  
NAD 83, Zone V, feet  
10M DEM - DWR 2008  
Data Sources: 2010-11  
SBVWCD, SBVMWD



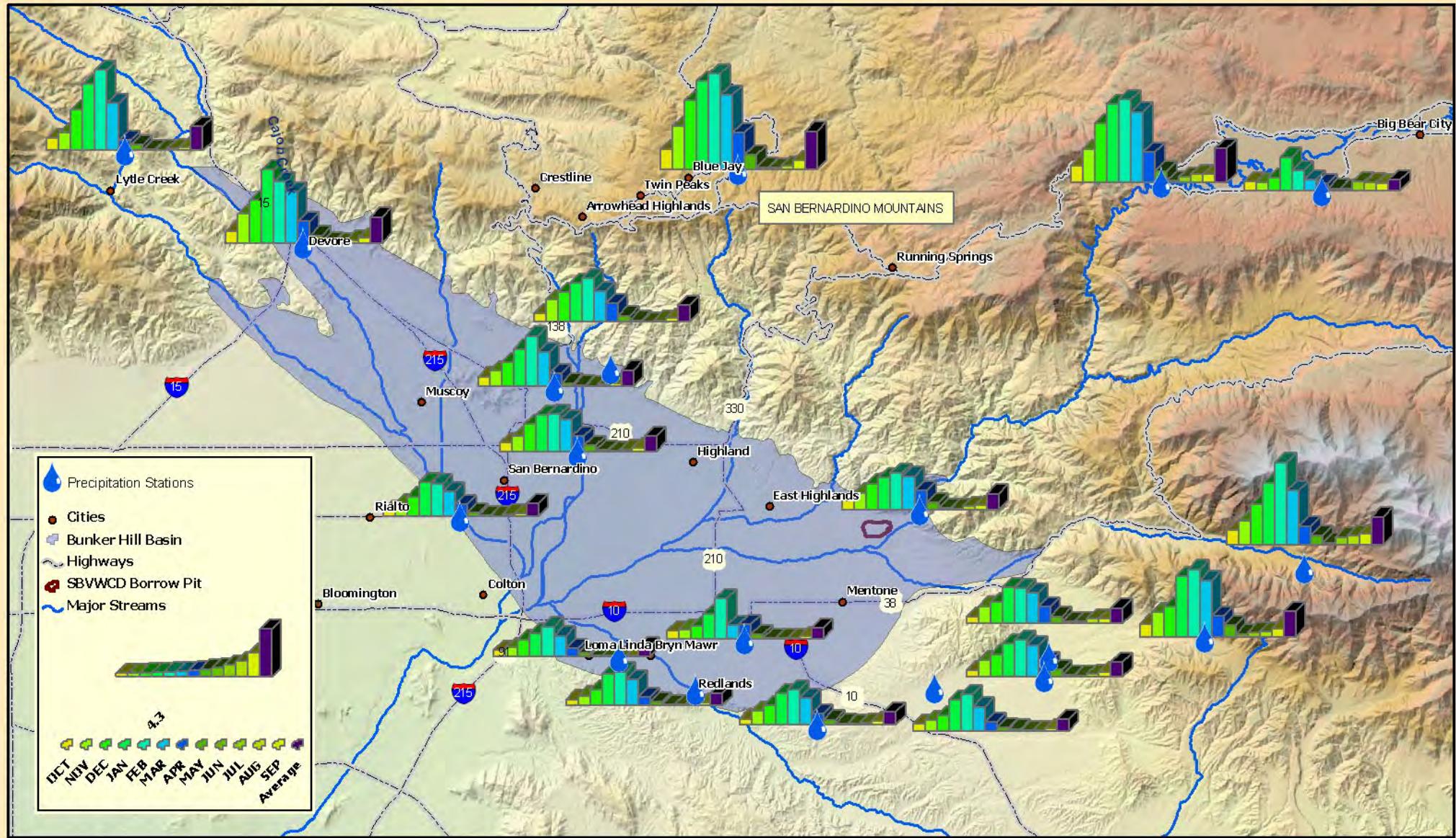
 Miles

**Bunker Hill SubBasins  
2010 - 2011  
Engineering Investigation Report**

Engineering Investigation  
March 2011



**Figure 3**



State Plane  
NAD 83, Zone V, feet  
10M DEM - DWR 2008  
Data Sources:  
USGS Gauging Stations  
2010



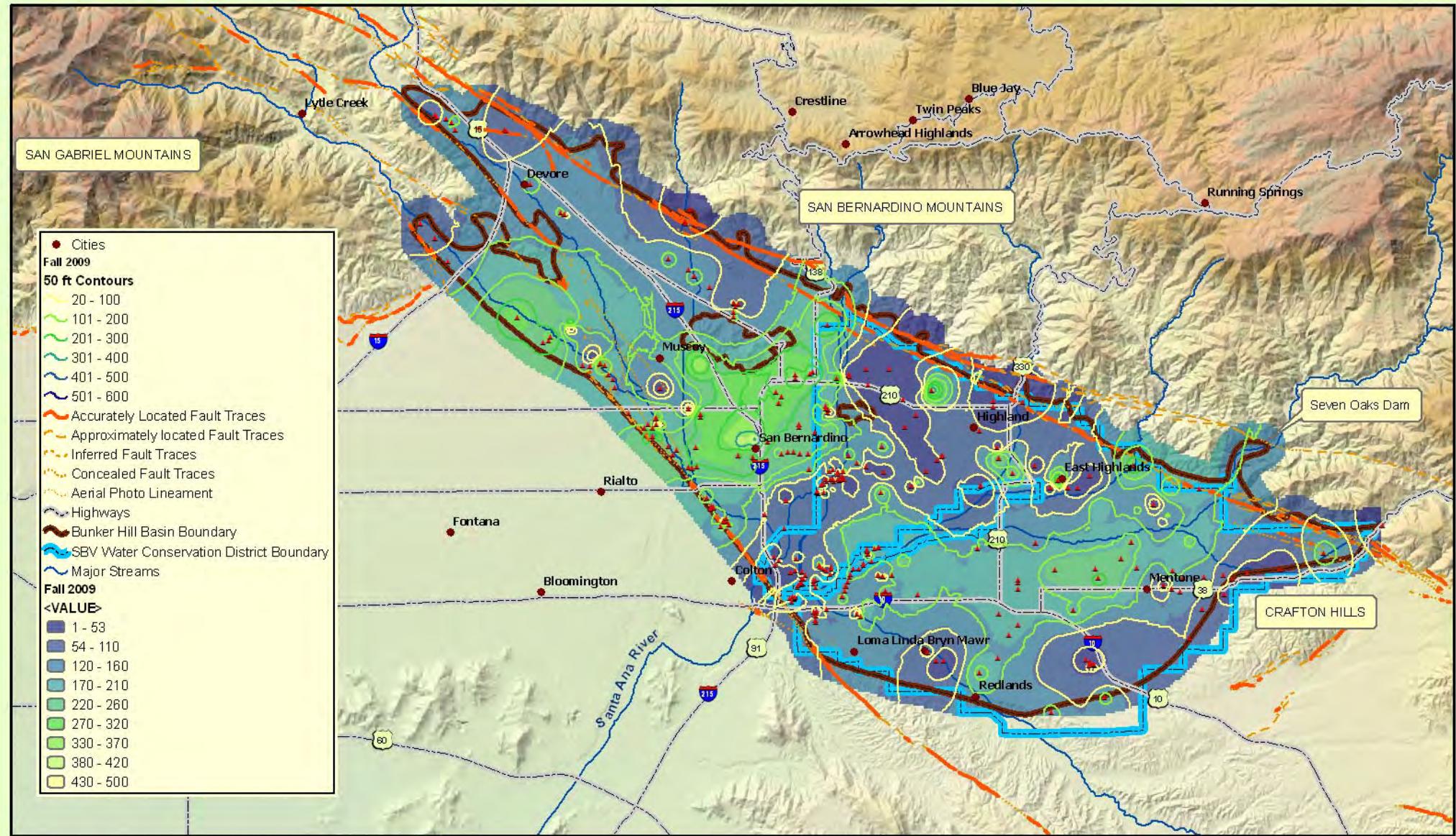
## Precipitation Trends and Station Locations 2010 - 2011 DRAFT NUMBERS Engineering Investigation Report

Engineering Investigation  
March 2011



Map Creation: SBVWCD GIS  
L. Pierce

Figure 4



State Plane NAD 83, Zone V, feet  
10M DEM DWR  
SBWWCD Water Elevation  
2009-2010 161 Wells  
IDW Interpolation Method  
Watermaster Services,  
All City Water Agencies  
and SBVMWD



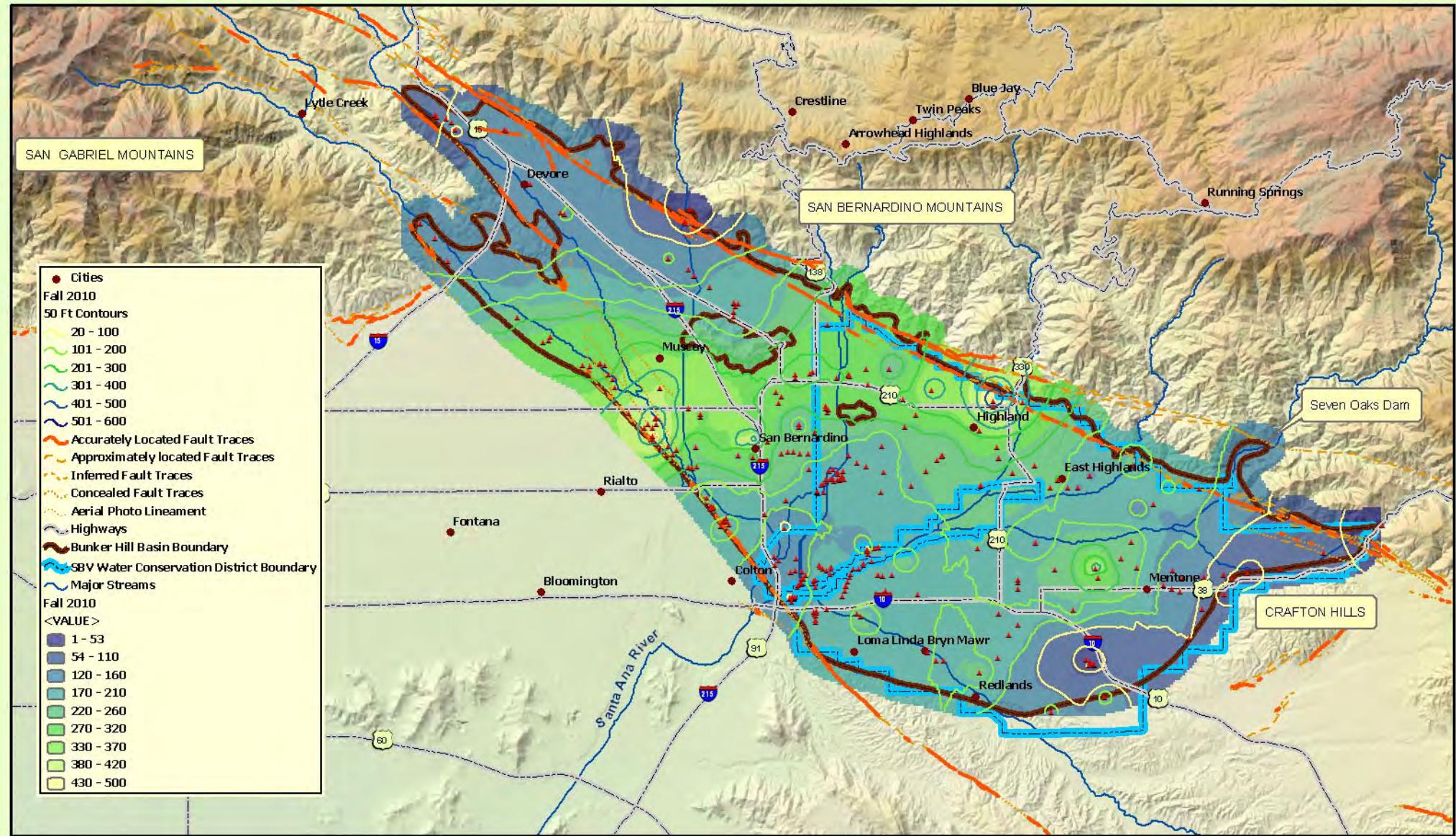
## Water Elevation Contour Surface Fall 2009 2010-2011 Engineering Investigation Report

Engineering Investigation  
March 2011

Source: SBWWCD GIS  
L. Pierce



Figure 5



State Plane NAD 83, Zone V, feet  
10M DEM DWR  
SBWCD Water Elevation  
2009- 2010 181 Wells  
IDW Interpolation Method  
Watermaster Services,  
All City Water Agencies  
and SBVMWD



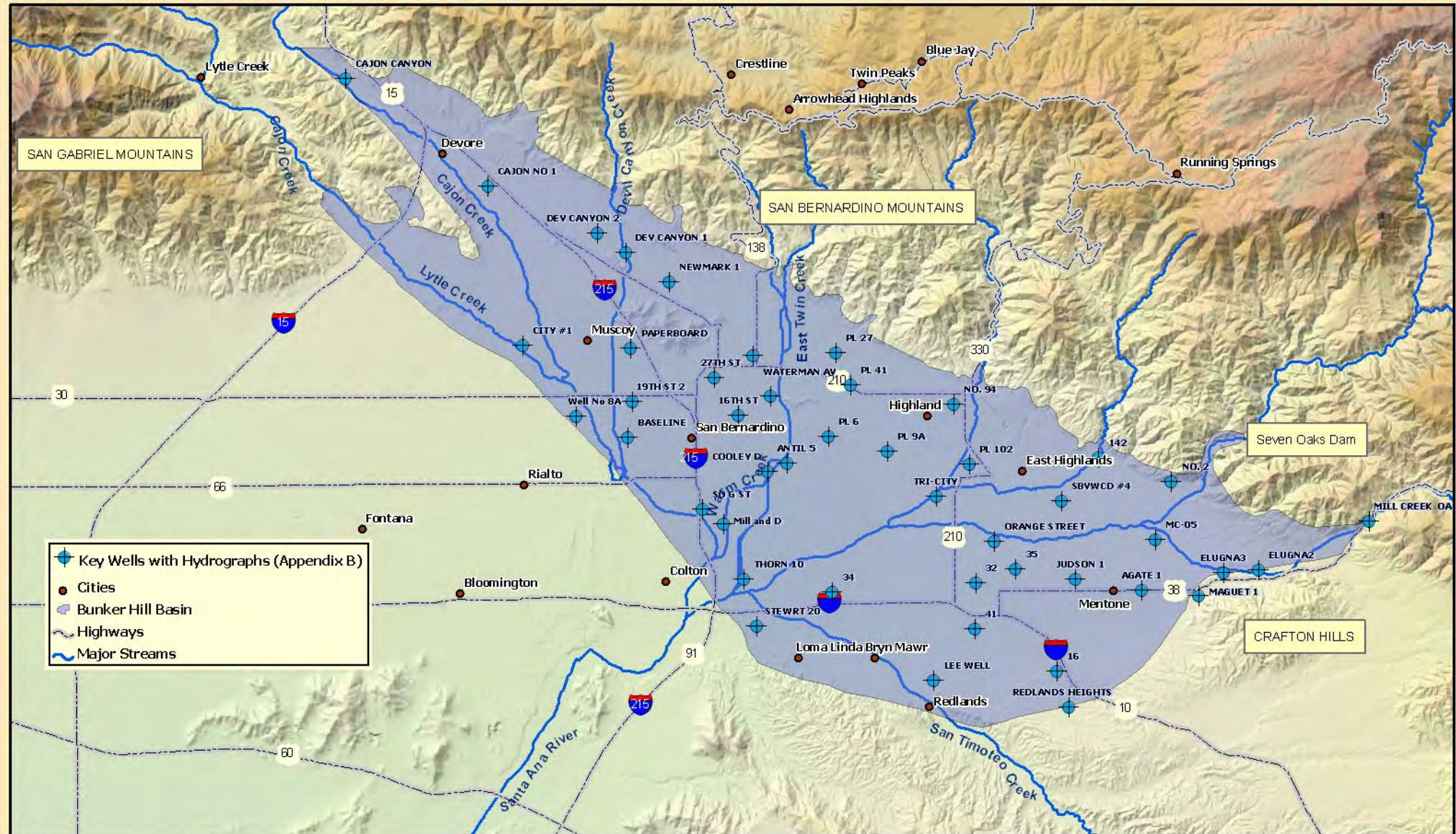
## Water Elevation Contour Surface Fall 2010 2010-2011 Engineering Investigation Report

Engineering Investigation  
March 2011

Source: SBWCD GIS  
L. Pierce



**Figure 6**



State Plane  
NAD 83, Zone V, feet  
10M DEM - DWR 2008  
Data Sources: 2010 -11  
SBVWCD, SBVMMD, VVWD



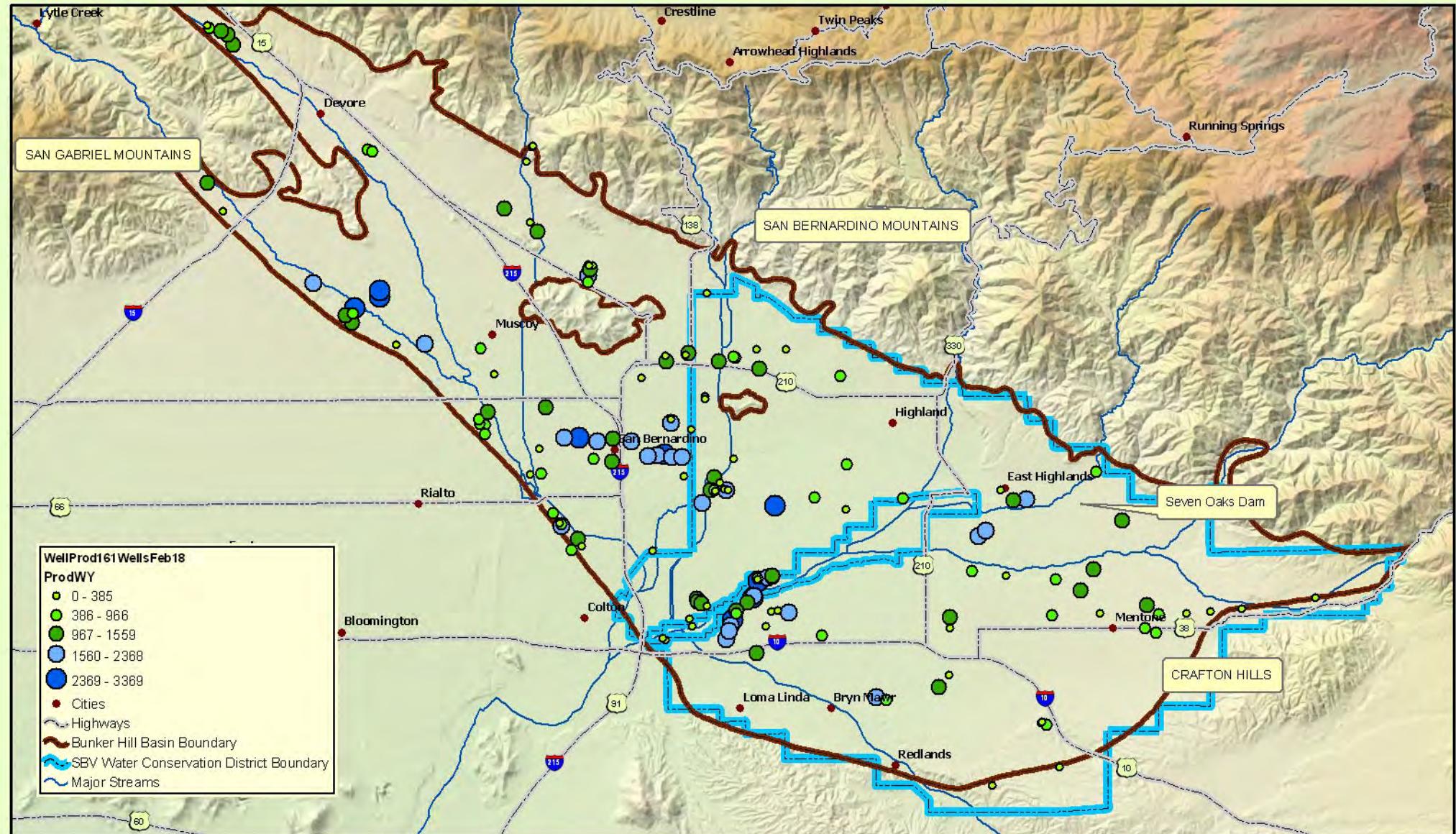
## Key Wells ( Appendix B Hydrographs) 2010 - 2011 Engineering Investigation Report

Engineering Investigation  
March 2011



Map Creation: SBVWCD GIS  
L. Pierce

Figure 7



State Plane  
NAD 83, Zone V, feet  
10M DEM DWR  
Data Sources:  
SBVWCD EI Production  
161 Wells  
Water master Services,  
All City Water Agencies  
and SBVMWD

0 0.5 1 2 3 Miles

## Groundwater Production -Bunker Hill Basin Subbasins Total Well Production for July 2009 - June 2010 (Water Year) 2010-2011

### Engineering Investigation Report

Engineering Investigation  
March 2011



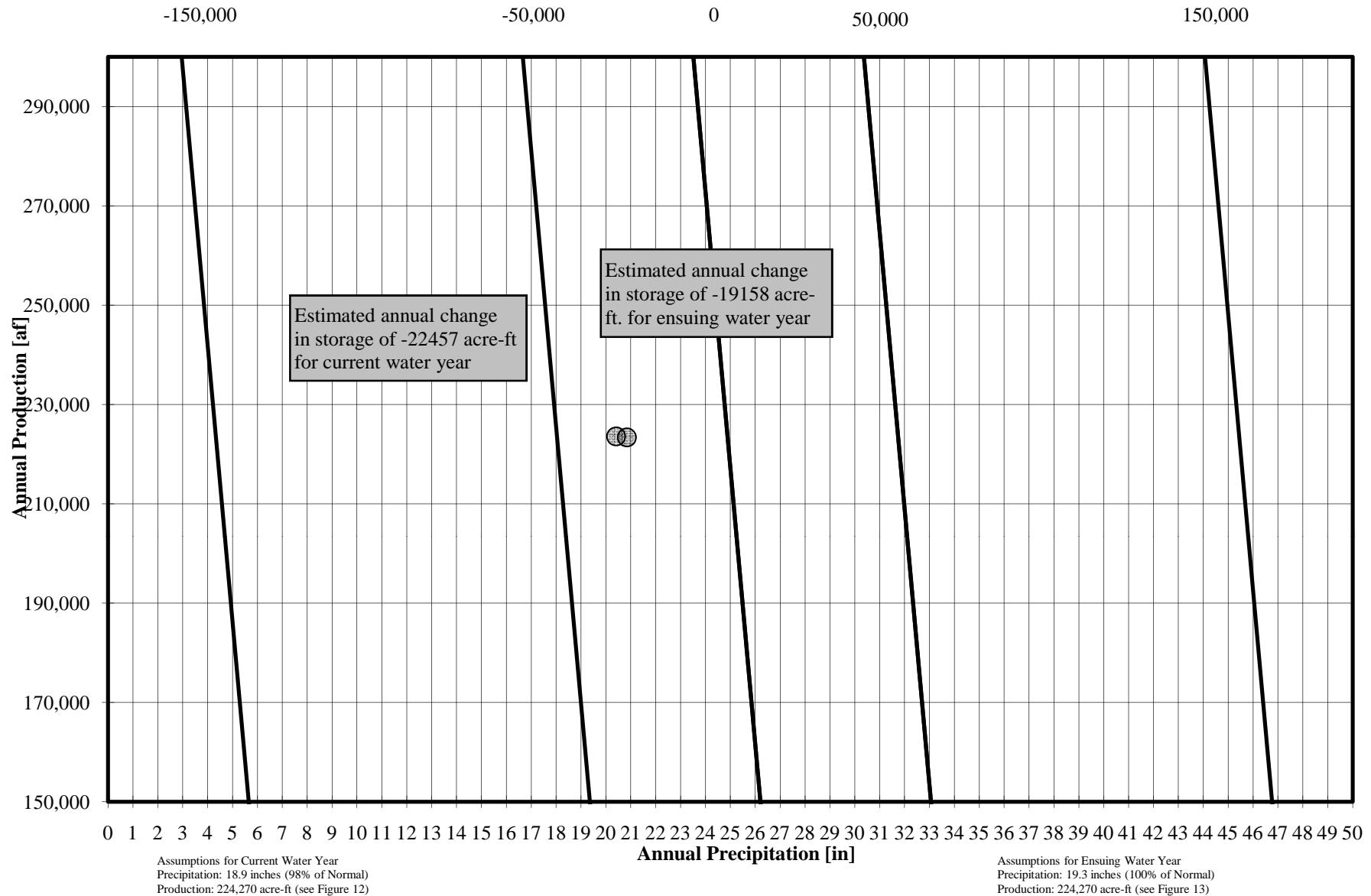
Source: SBVWCD GIS  
L. Pierce

**Figure 8**

# Prediction Chart for Annual Change in Storage

Current and Ensuing Water Years

Annual Change in Storage [af]

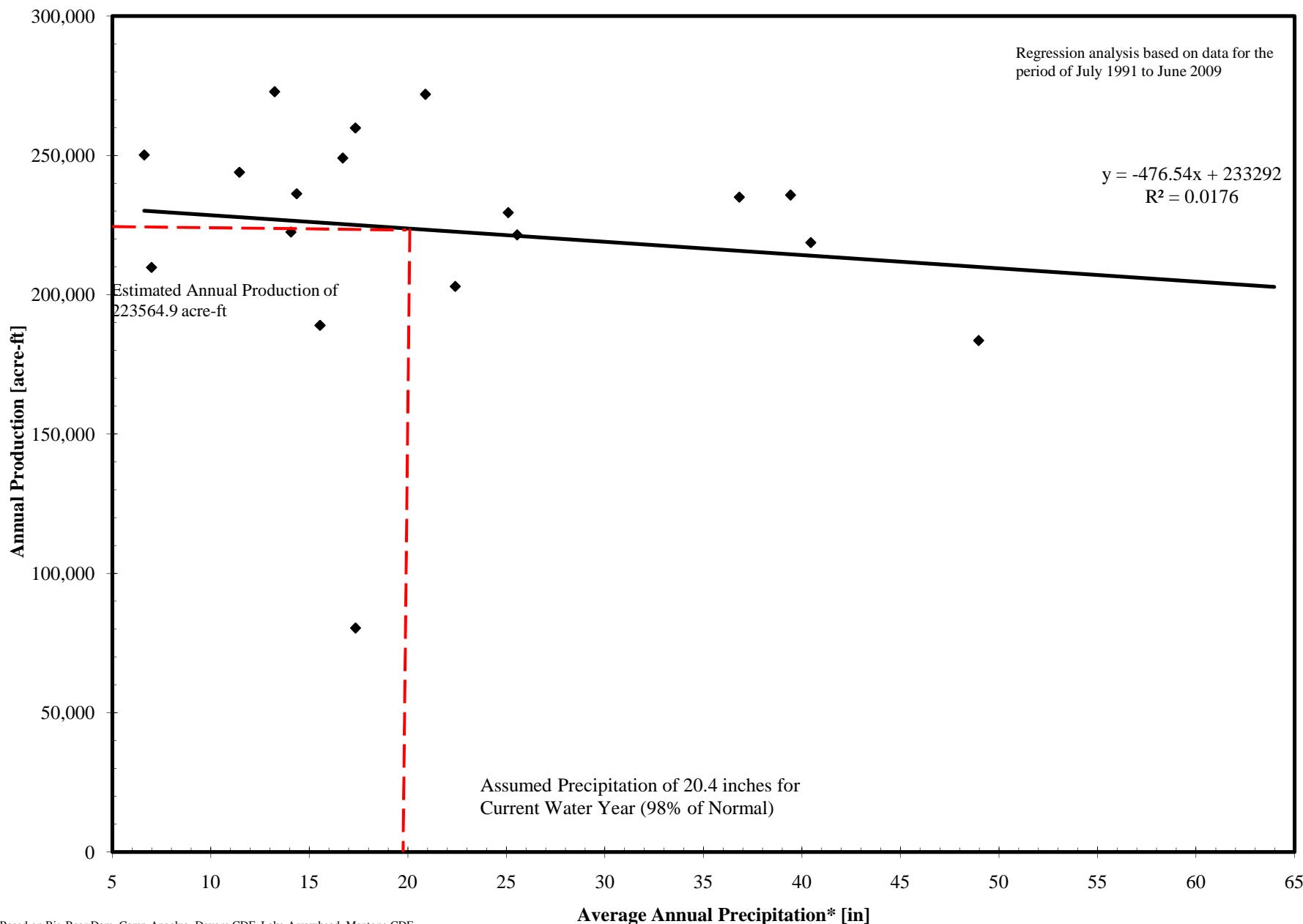


\* Based on Big Bear Dam, Camp Angelus, Devore CDF, Lake Arrowhead, Mentone CDF, Redlands Country Club, San Bernardino County Hospital, Santa Ana Powerhouse #3, and Yucaipa CDF.

$$\text{Change in Storage} = -131730 + 7620 * \text{Precipitation} - 0.207 \text{ Production} \quad (R^2 = 0.87)$$

# Estimate of Production for Current Water Year

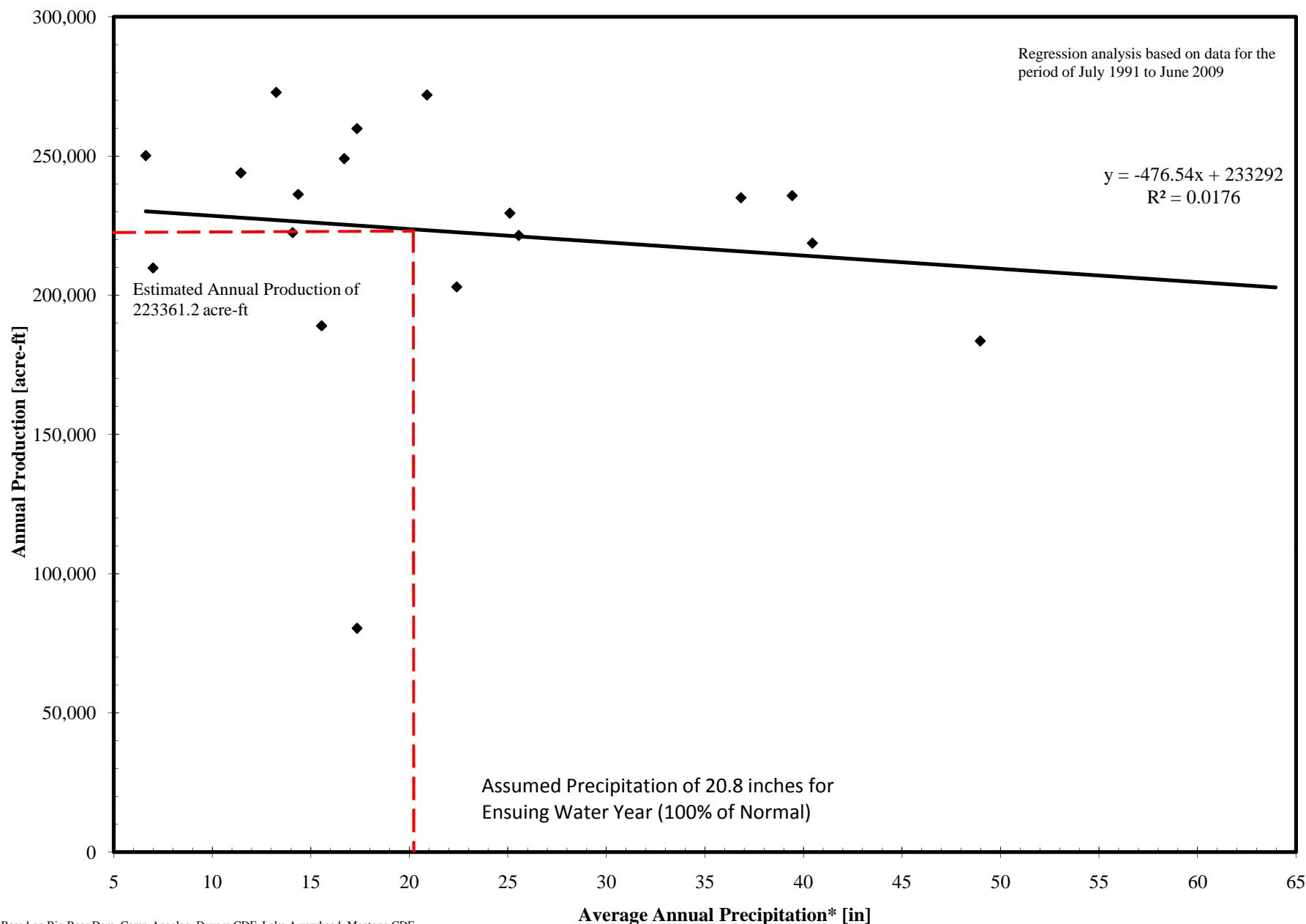
(July 2010 to June 2011)



\*Based on Big Bear Dam, Camp Angelus, Devore CDF, Lake Arrowhead, Mentone CDF, Redlands Country Club, San Bernardino County Hospital, Santa Ana Powerhouse #3, and Yucaipa CDF.

# Estimate of Production for Ensuing Water Year

(July 2011 to June 2012)



\*Based on Big Bear Dam, Camp Angelus, Devore CDF, Lake Arrowhead, Mentone CDF, Redlands Country Club, San Bernardino County Hospital, Santa Ana Powerhouse #3, and Yucaipa CDF.

# **Engineering Investigation of the Bunker Hill Basin 2010-2011**

## **Tables**

Tables



### Summary of Percentage of Normal Precipitation

1983 to 2010 (Historic Annual Precip)

Station	Historic Annual Avg. [in]	1983 -1984 [in]	1984 -1985 [in]	1985 -1986 [in]	1986 -1987 [in]	1987 -1988 [in]	1988 -1989 [in]	1989 -1990 [in]	1990 -1991 [in]	1991 -1992 [in]	1992 -1993 [in]	1993 -1994 [in]	1994 -1995 [in]	1995 -1996 [in]	1996 -1997 [in]	1997 -1998 [in]	1998 -1999 [in]	1999 -2000 [in]	2000 -2001 [in]	2001 -2002 [in]	2002 -2003 [in]	2003 -2004 [in]	2004 -2005 [in]	2005 -2006 [in]	2006 -2007 [in]	2007 - 2008 [in]	2008 - 2009 [in]	2009 - 2010 [in]	Each Station 16-Yr. Avg. [in.]
Big Bear Dam	35.84	19.33	22.25	40.28	19.17	28.89	20.84	17.60	34.79	38.90	81.92	28.67	52.65	24.40	29.97	51.70	14.20	20.60	21.40	9.20	38.10	19.60	59.10	26.40	10.30	23.00	19.70	26.00	29.7
Crafton Hills	12.17	5.62	5.90	12.64	9.00	12.11	10.00	6.30	12.27	10.69	22.99	5.45	27.10	7.84	16.67	25.55	7.29	6.40	10.49	2.46	17.57	9.47	31.39	11.45	3.34	13.34	8.82	17.80	12.0
Del Rosa Ranger Station	18.10	11.95	15.40	20.13	9.48	18.92	13.16	12.85	8.79	24.24	41.39	12.30	27.69	14.21	17.31	37.26	8.30	12.73	16.60	6.09	19.69	13.02	38.55	17.40	8.77	17.77	13.57	22.01	17.6
Devore CDF	27.12	21.53	23.99	36.79	12.39	17.90	10.75	15.00	20.41	31.32	63.98	15.40	45.44	20.58	33.10	45.13	13.61	8.04	15.52	10.90	35.35	16.44	60.36	24.80	8.86	25.21	16.51	34.12	25.0
Fallsvale	31.94	19.00	16.90	50.00	23.00	20.30	3.50	51.00	22.50	36.00	71.90	52.00	54.90	22.10	33.80	53.00	16.30	21.20	15.30	6.50	37.50	25.20	61.40	26.90	11.10	29.30	24.70	2.85	31.0
Lake Arrowhead	40.30	27.07	30.76	50.56	23.74	40.39	28.51	26.62	23.68	45.24	85.00	28.20	74.51	30.84	36.50	72.80	18.10	25.80	28.60	10.70	36.50	22.70	69.70	46.20	18.50	41.91	30.28	26.00	37.4
Loma Linda FD	10.80	6.08	9.15	13.16	7.41	10.45	8.84	7.69	7.16	13.44	25.56	10.99	19.02	7.15	9.78	22.74	5.12	7.74	6.38	2.45	14.48	8.06	22.59	11.06	3.51	9.63	8.95	13.10	10.7
Lytle Creek at Foothill	13.38	8.93	10.19	16.04	7.00	12.96	3.90	8.50	15.51	14.91	31.61	9.16	25.51	12.23	13.83	25.84	6.25	9.81	12.12	4.00	13.60	7.16	27.23	11.22	3.84	11.89	9.03	13.03	12.8
Lytle Creek Fire Station	23.82	12.60	18.95	27.60	11.20	22.40	12.83	17.90	32.07	49.09	87.71	20.50	47.57	24.49	23.10	52.18	11.81	20.40	18.34	4.47	16.96	12.09	44.11	18.92	4.22	21.89	3.32	0.00	24.5
Mentone CDF	12.53	5.09	7.74	12.01	9.23	8.85	8.64	6.13	12.55	15.93	23.85	8.35	17.10	9.42	15.73	27.09	4.28	9.08	10.16	4.06	15.00	10.38	24.94	11.01	5.41	10.75	9.38	14.96	11.6
Oak Glen	26.84	18.80	22.02	26.00	19.29	21.46	17.82	17.71	26.92	30.78	57.96	18.76	57.92	20.04	30.39	49.46	11.32	17.12	12.28	6.72	14.28	18.39	34.14	22.58	9.71	27.60	19.92	29.72	24.2
Redlands - Roth	12.19	4.99	8.72	9.25	7.79	11.18	8.08	7.21	13.34	14.96	25.57	10.06	20.49	8.08	10.77	22.29	6.46	7.41	10.38	3.35	12.18	9.16	24.43	9.52	3.31	9.46	8.82	15.12	11.0
Redlands Country Club	13.65	8.16	10.74	13.38	8.80	14.18	10.68	8.58	14.48	16.11	29.44	12.55	19.76	8.52	9.03	17.22	6.30	5.68	9.96	3.97	16.45	11.58	29.37	10.30	4.13	11.93	11.35	17.25	12.4
San Bernardino CDF	17.22	11.14	16.06	20.12	9.27	18.26	12.85	10.55	15.49	21.89	37.35	4.46	20.29	15.77	16.17	34.32	9.30	13.62	16.61	5.29	13.14	11.52	37.28	16.39	6.33	18.91	9.85	20.45	16.2
San Bernardino Co. Hospital	15.88	10.81	12.86	17.86	8.08	13.53	12.63	8.12	15.48	16.54	30.78	11.65	24.10	11.92	17.80	32.67	8.02	11.09	2.33	3.60	17.06	10.49	29.89	13.20	4.68	12.81	10.05	17.03	14.2
Santa Ana Pumphouse #3	17.00	14.15	11.88	15.87	12.28	14.67	9.38	10.32	15.84	18.38	22.98	15.92	24.85	11.05	16.60	27.95	7.01	6.78	8.63	3.23	18.24	9.40	27.65	11.78	6.13	10.73	9.73	14.58	13.9
Yucaipa CDF	15.73	9.75	10.69	12.96	11.02	11.33	9.74	7.25	11.16	17.85	34.20	11.40	30.24	10.52	15.62	24.70	7.63	11.10	9.92	5.66	19.47	11.84	32.70	13.14	6.56	14.67	12.11	18.79	14.4
Yucaipa Valley Water District	15.82	9.66	12.31	15.20	10.55	14.36	10.55	10.84	16.98	18.68	18.08	12.51	25.20	10.88	16.93	28.60	9.87	9.63	9.65	5.27	19.50	11.10	32.73	12.52	5.53	14.79	12.11	17.68	14.4
Redlands Daily Facts	12.75	7.95	10.42	11.25	9.14	12.72	8.86	7.65	13.75	16.00	27.99	12.08	21.34	8.24	12.58	27.15	6.10	7.88	10.25	3.58	16.03	9.39	26.42	10.64	4.03	9.80	9.00	0.00	12.3
Big Bear City	13.48	17.57	13.23	19.12	10.18	10.59	9.37	10.23	17.81	13.96	22.92	11.53	18.59	11.17	12.06	16.83	6.53	4.75	20.14	3.33	12.62	7.55	23.25	14.36	3.67	8.53	3.51	16.24	12.4

Percent of Normal	100%	65%	75%	114%	62%	87%	60%	69%	91%	120%	218%	81%	169%	75%	100%	180%	48%	61%	69%	27%	104%	66%	191%	88%	34%	89%	65%	87%	93%
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# Change in Groundwater Levels in Key Wells

Fall 2009 to Fall 2010

WCDCode	State Well Number	Well Name	Owner Or Measuring Agency	2009 Depth To Water (ft)	2010 Depth To Water (ft)	Difference Fall 2009 to Fall 2010
1865	1N4W25A01S	27	East Valley Water District	258.6	206.0	52.6
1984	1N3W30N01S	41	East Valley Water District	305.6	306.0	-0.4
1364	1S3W04J01S	102	East Valley Water District	230.2	230.0	0.2
1401	1S3W01H01S	142 Mt. Harrison	East Valley Water District	282.9	220.5	62.4
1660	1N3W33F01S	94 Corwin	East Valley Water District	390	393.6	-3.6
1851	1S3W06H04S	9A	East Valley Water District	216.6	216.2	0.4
1010	1S3W09E02S	Tri-City Concrete	East Valley Water District	215.6	217.2	-1.6
1727	1S2W19K01S	Agate #1	Redlands, City of	125.0	140	-15.0
1708	1S2W22C02S	E. Lugonia #2	Redlands, City of			0.0
1712	1S2W21B02S	E. Lugonia #3	Redlands, City of	28.0	28	0.0
1714	1S2W21D01S	E. Lugonia #6	Redlands, City of	58.0	51	7.0
1970	1S3W32J02S	Lee Well	Redlands, City of	214.0	219	-5.0
1706	1S2W36F01S	Maguet #1	Redlands, City of	21.0	20	1.0
1709	1S2W21E01S	Maguet #2	Redlands, City of	35.0	45	-10.0
1707	1S1W08H01S	Mill Creek #1	Redlands, City of	12.0	0	12.0
1819	1S3W15F01S	Orange Street	Redlands, City of	135.0	154	-19.0
1591	2S3W01E01S	Redlands Heights	Redlands, City of	167.0	170	-3.0
1718	1S3W35G09S	Well #13	Redlands, City of	66.0	64	2.0
1720	1S3W35H03S	Well #16	Redlands, City of	47.0	44	3.0
1722	1S3W21H01S	Well #32	Redlands, City of	200.0	205	-5.0
1723	1S4W24K01S	Well #34	Redlands, City of	185.0	196	-11.0
1964	1S3W22A02S	Well #35	Redlands, City of	229.0	232	-3.0
1725	1S3W28H01S	Well #41	Redlands, City of	172.0	276	-104.0
1702	1N5W23Q01S	City 1	Rialto, City of	263	284	-21.0
1668	01S04W02P02S	Cooley D	Riverside, City of	142		0.0
1662	1S4W14P02S	Raub 1	Riverside, City of	158	164.0	-6.0
1677	1S4W27A19S	Stewart 19	Riverside, City of	146		0.0
1744	1S4W27H01S	Stewart 20	Riverside, City of	168.11		0.0
1767	1S4W22B03S	Thorn 10	Riverside, City of	58		0.0
1683	1S4W22H04S	Warren 1	Riverside, City of	156		0.0
1554	1S4W23A02S	26-1	Riverside, City Of-Gage Canal	152.0	158.00	-6.0
2291	1S2W07B01S	SBVWCD #1	San Bernardino Valley Water Cons. Dist.	240.61	207.17	33.4
2290	1S2W07K01S	SBVWCD #2	San Bernardino Valley Water Cons. Dist.	158.64	151.6	7.0
2286	1S3W12J01S	SBVWCD #3	San Bernardino Valley Water Cons. Dist.	153.89	135.2	18.7
2288	1S3W11H01S	SBVWCD #4	San Bernardino Valley Water Cons. Dist.	195.22	171	24.2
1526	1N4W34G03S	16th & Sierra Way	San Bernardino, City of	252.2	161	91.2
1525	1N4W34G01S	17th & Sierra Way #2	San Bernardino, City of	241.5		0.0
1517	1N4W32D03S	19th Street No. 1	San Bernardino, City of	305.4		0.0
1520	1N4W27M02S	27th Street Well	San Bernardino, City of	301.50	287.5	14.0
1519	1N4W27G01S	30th & Mtn. View	San Bernardino, City of	332.00	318.9	13.1
1979	1N4W27B01S	31st & Mtn. View	San Bernardino, City of	339.30	324.2	15.1
2066	1S4W02K08S	Antil Well #6	San Bernardino, City of	185	172	13.0
2062	1N4W32N01S	Baseline Well	San Bernardino, City of	265.00	257	8.0

## Change in Groundwater Levels in Key Wells

Fall 2009 to Fall 2010

WCDCode	State Well Number	Well Name	Owner Or Measuring Agency	2009 Depth To Water (ft)	2010 Depth To Water (ft)	Difference Fall 2009 to Fall 2010
1510	2N5W19K02S	Cajon Canyon Well	San Bernardino, City of	68.20	56.1	12.1
1910	1N5W03H02S	Cajon Well #2	San Bernardino, City of	190.90	153	37.9
2115	1N5W03A02S	Cajon Well #3	San Bernardino, City of	184.80	147.5	37.3
2008	1N4W06H02S	Devil Canyon #3	San Bernardino, City of	28.40	26.9	1.5
2007	1N4W06H01S	Devil Canyon #4	San Bernardino, City of	41.40	41.2	0.2
3139	01N04W32PS	EPA EXTRAC WELL 112	San Bernardino, City of	394.4	424	-29.6
1537	1S4W10N06S	Mill & D	San Bernardino, City of	89.2	93.5	-4.3
1514	1N4W16E01S	Newmark #1	San Bernardino, City of	180.5	185.4	-4.9
1516	1N4W16E03S	Newmark #3	San Bernardino, City of	187.3	190.8	-3.5
1647	1N4W26P03S	Perris Hill #5	San Bernardino, City of	279.4	272.6	6.8
	01S04W22C	21,Wastewater N MW #1	San Bernardino, City of / shallow wells			0.0
2448	1S4W23H	52 Brier/Gould/Tippecanoe	San Bernardino, City of / shallow wells	197.42	38.00	159.4
1936	1N5W23Q01S	2/Lower 7	West Valley Water District	250.00	292.0	-42.0
1419	1N5W25E01S	5A/Lower 5	West Valley Water District	261	271.0	-10.0
1612	1N5W36H04S	7/Lord 7	West Valley Water District		427	0.0
2271	1S4W25D07S	Anderson III	Western Municipal Water District			0.0

## Annual Change in Storage By Basin

**Fall 2009 to Fall 2010**

[1] [2] [3] [4]

Sub-area	Annual Change in Water Level2010 [ft]	Area [acres]	Storativity ( $S$ )	Annual Change in Storage** [acre-ft]
Bunker Hill I - Northeast of 215 Freeway	14.18	7,795	0.11	12,161
Bunker Hill I - Southwest of 215 Freeway	3.24	11,714	0.09	3,417
Bunker Hill II - West of Mentone Fault	12.94	35,206	0.06	27,343
Bunker Hill II - East of Mentone Fault, North	19.11	8,584	0.13	21,325
Bunker Hill II - East of Mentone Fault, South	0.75	2,507	0.13	244
Lytle Basin - Northwest of Barrier J	0.00	1,924	0.13	0
Lytle Basin - Southeast of Barrier J	-7.68	5,237	0.07	-2,817
Pressure Zone - North of Santa Ana Wash	3.47	11,920	0.02	827
Pressure Zone - Santa Ana Wash	-0.21	6,686	0.02	-28

**Total = 50,312**

[1] Based on average changes in water level within each Sub-area

[2] Estimated using GIS

[3] Based on data from Hardt and Hutchinson (1980).  $S$ , storativity: The amount of water stored or released per unit area of aquifer given unit head change.

[4] = [1] x [2] x [3]

\*A positive sign denotes an increase in water level and a negative sign represents a decline in water level.

\*\* A positive sign denotes an increase in storage and a negative sign represents a decline of storage.

## Accumulated Change in Storage for Bunker Hill Basin

1989 to 2010 (Based on "Zero Year" of 1993)

Year	Accumulated Storage [acre-ft]
1989	-58,000
1990	-170,700
1991	-196,000
1992	-191,000
1993	0
1994	-50,000
1995	41,100
1996	-43,100
1997	-75,500
1998	40,400
1999	-85,700
2000	-131,100
2001	-212,200
2002	-301,500
2003	-338,800
2004	-406,900
2005	-183,100
2006	-245,500
2007	-359,400
2008	-362,000
2009	<b>-397,600</b>
2010	<b>-347,288</b>

Note: A negative sign indicates a decline in storage and a positive sign represents an increase in storage.

## Production for Sub-basins of Bunker Hill Basin

Preceding Water Year (July 2009 to June 2010)

Sub-area	Production July 2009 to June 2010 [acre-ft] <sup>2</sup>
Bunker Hill I - Northeast of Interstate 215	5,440
Bunker Hill I - Southwest of Interstate 215	22,989
Bunker Hill II - West of Mentone Fault	32,442
Bunker Hill II - East of Mentone Fault, North	5,783
Bunker Hill II - East of Mentone Fault, South	8,818
Lytle Basin - Northwest of Barrier J	4,124
Lytle Basin - Southeast of Barrier J	24,480
Pressure Zone - North of Santa Ana Wash	67,213
Pressure Zone - Santa Ana Wash	42,173
<b>Total</b>	<b>213,461</b>

**Notes:**

1 - 251 Wells Used in these Calculations

2 - Estimated for Water Year July 2009-June 2010 Production.

3 - Refer to Appendix C for Well Values Compiled for Estimate

*Data Sources: 25 Primary Water Purveyors, as well as San Bernardino Watermaster, and SBVMWD*

# Estimates of Percentage of Normal Precipitation for Current Water Year (July 2010 to June 2011)

	[1]	[2]	[3]	[4]	[5]	[6]	[7]		
Station	July to June	July. to June	Season - July to December			Season - January to June			Jul. 2009 to Jun. 2010
	Historic Average Annual	2009-2010	Historic Average	Sum Jul 2009 to Dec 2009	% of Normal	Historic Average	Sum Jan 2010 to Jun 2010	% of Normal	Water Year % of Normal
	[inches]	[inches]	[inches]	[inches]	[%]	[inches]	[inches]	[%]	[%]
Big Bear Dam	35.4	26.0	11.60	10.40	90%	23.84	15.60	65%	73%
Camp Angelus	28.6	18.80	9.79	7.40	76%	18.83	11.40	61%	66%
Devore CDF	27.5	34.1	8.16	9.63	118%	19.29	24.47	127%	124%
Lake Arrowhead	40.5	26.0	13.01	10.40	80%	27.44	15.60	57%	64%
Mentone CDF	12.6	14.9	3.74	3.28	88%	8.86	11.66	132%	119%
Redlands Country Club	13.9	17.3	4.08	3.10	76%	9.87	14.22	144%	124%
San Bernardino County Hospital	15.9	17.1	4.87	3.81	78%	11.03	13.29	120%	108%
Santa Ana Pumphouse #3	17.0	14.5	5.38	2.33	43%	11.61	12.19	105%	85%
Yucaipa CDF	15.9	18.8	4.77	3.38	71%	11.10	15.39	139%	118%

Avg (in) = **23.0**    **20.8**

Average = **80%**

Average = **105%**

**2009-2010 Average = 98%**

[1], [4]: Based on data provided by San Bernardino County Department of Transportation/Flood Control

[3] = ([2] / [1]) x 100

[5] Assumed equal to season average (January to June)

[6] = ([5] / [4]) x 100

[7] = (([2] + [5]) / ([1] + [4])) x 100

# Average Annual Change in Storage for Bunker Hill Basin

Fall 2000 to Fall 2010

(The Immediate Past 10 Water Years)

Sub-area	Average Change in 10 Years in Water Level*	Area [acres]	Storativity ( $S$ )	Average Annual Change in Storage** [acre-ft]
	[ft]			
Bunker Hill I - Southwest of 215 Freeway	-3.50	11,714	0.09	-3,612
Bunker Hill I - Northeast of 215 Freeway	-2.56	7,795	0.11	-2,192
Bunker Hill II - West of Mentone Fault	-8.51	35,206	0.06	-17,687
Bunker Hill II - East of Mentone Fault	0.98	11,091	0.13	1,406
Lytle Basin - Southeast of Barrier J	9.79	5,237	0.07	3,589
Lytle Basin - Northwest of Barrier J	-1.08	1,924	0.13	-270
Pressure Zone - North of Santa Ana Wash	13.38	11,920	0.02	3,190
Pressure Zone - Santa Ana Wash	-9.47	6,686	0.02	-1,266

Total = **-16,842**

[2] Estimated using GIS.

[3] Based on data from Hardt and Hutchinson (1980).  $S$  storativity: The amount of water stored or released per unit area of aquifer given unit head change.

[4] = [1] x [2] x [3]

\* A positive sign denotes an increase in water level and a negative sign represents a decline in water level.

\*\* A positive sign denotes an increase in storage and a negative sign represents a decline in storage.

## Summary of Surface Distribution Water for Bunker Hill Basin

(1984 to 2010 )

Streamflow Diversions	1984 [acre-ft]	1985 [acre-ft]	1986 [acre-ft]	1987 [acre-ft]	1988 [acre-ft]	1989 [acre-ft]	1990 [acre-ft]	1991 [acre-ft]	1992 [acre-ft]	1993 [acre-ft]	1994 [acre-ft]	1995 [acre-ft]	1996 [acre-ft]	1997 [acre-ft]	
<b>Lytle Creek</b>															
Fontana Union WC	2,446	2,743	1,798	2,725	2,991	2,245	204	1,633	12,980	7,860	12,270	10,000	10,100	NA	
Mount Vernon WC	724	724	724	724	724	724	724	724	724	1,143	102	0	0	0	
Rialto, City of	1,654	1,075	1,325	539	1,111	1,005	792	1,014	743	193	843	44	1,070	393	
San Bernardino, City of	1,448	1,448	1,448	1,448	1,448	1,448	1,448	1,448	1,448	520	NA	2,400	2,400	0	
West Valley Water District	3,696	3,340	3,686	3,686	3,696	3,696	2,554	3,701	3,696	3,696	3,697	3,696	3,686	4,079	
<b>Subtotal</b>	<b>9,968</b>	<b>9,330</b>	<b>8,981</b>	<b>9,122</b>	<b>9,970</b>	<b>9,118</b>	<b>5,722</b>	<b>8,520</b>	<b>19,591</b>	<b>13,412</b>	<b>16,912</b>	<b>16,140</b>	<b>17,256</b>	<b>4,472</b>	
<b>Mill Creek</b>															
Redlands, City of	4,617	12,932	11,676	11,178	7,731	8,285	6,794	11,109	14,559	19,086	14,505	9,786	12,250	10,250	
SBVWCD Mill Creek Spreading															
<b>Subtotal</b>	<b>4,617</b>	<b>12,932</b>	<b>11,676</b>	<b>11,178</b>	<b>7,731</b>	<b>8,285</b>	<b>6,794</b>	<b>11,109</b>	<b>14,559</b>	<b>19,086</b>	<b>14,505</b>	<b>9,786</b>	<b>12,250</b>	<b>10,250</b>	
<b>Bunker Hill Creeks</b>															
Arrowhead Water & Power West Twin Crk															
Arrowhead Water & Power East Twin Crk															
Devore Water Company Kimbark Lower Cajon															
<b>Subtotal</b>	<b>0</b>														
<b>Santa Ana River</b>															
Bear Valley Mutual WC	23,392	19,837	23,160	16,373	14,170	14,785	11,244	20,651	26,014	42,079	23,812	30,794	38,252	31,479	
Redlands Water Co	NA	NA	1,122	961	963	890	577	NA	NA	NA	NA	NA	NA	760	
SBVWCD SAR Spreading															
<b>Subtotal</b>	<b>23,392</b>	<b>19,837</b>	<b>24,282</b>	<b>17,334</b>	<b>15,133</b>	<b>15,675</b>	<b>11,821</b>	<b>20,651</b>	<b>26,014</b>	<b>42,079</b>	<b>23,812</b>	<b>30,794</b>	<b>38,252</b>	<b>32,239</b>	
<b>Subtotal</b>	<b>23,392</b>	<b>19,837</b>	<b>25,404</b>	<b>18,295</b>	<b>16,096</b>	<b>16,565</b>	<b>12,398</b>	<b>20,651</b>	<b>26,014</b>	<b>2,314</b>	<b>23,812</b>	<b>30,794</b>	<b>38,252</b>	<b>32,239</b>	
Streamflow Diversions	1998 [acre-ft]	1999 [acre-ft]	2000 [acre-ft]	2001 [acre-ft]	2002 [acre-ft]	2003 [acre-ft]	2004 [acre-ft]	2005 [acre-ft]	2006 [acre-ft]	2007 [acre-ft]	2008 [acre-ft]	2009 [acre ft]	2010 [acre ft]	Avg. [acre-ft]	
<b>Lytle Creek</b>															
Fontana Union WC	NA	8,209	7,336	5,050	5,000	5,821									
Mount Vernon WC	0	0	0	0	0	0	0	0	0	0	0	0	0	414	
Rialto, City of	896	1,461	NA	1,305	1,143	726	1,707	1,209	1,448	1,160	1165.00	1,135	1,000	859	
San Bernardino, City of	0	0	0	0	0	0	580	5	254	483	498	450	450	1,174	
West Valley Water District	3,696	3,408	3,047	3,175	2,573	2,380	4,710	2,079	3,081	NA	3,369	2,435	3,322	3,502	
<b>Subtotal</b>	<b>4,592</b>	<b>4,869</b>	<b>3,047</b>	<b>4,480</b>	<b>3,716</b>	<b>3,106</b>	<b>6,997</b>	<b>3,293</b>	<b>4,783</b>	<b>8,209</b>	<b>8,209</b>	<b>8,209</b>	<b>8,209</b>	<b>11,771</b>	
<b>Mill Creek</b>															
Redlands, City of	11,224	11,951	8,852	9,496	5,867	12,541	10,168	12,574	15,409	9,607	12,332	5,485	7,004	10,871	
SBVWCD MC									29,138	9,510	1,531	3,810	4,450	8,891	9,555
SBVWCD-MC-DWR									0	0	0	431	555	831	7,998
<b>Subtotal</b>	<b>11,224</b>	<b>11,951</b>	<b>8,852</b>	<b>9,496</b>	<b>5,867</b>	<b>12,541</b>	<b>10,168</b>	<b>41,712</b>	<b>24,919</b>	<b>10,490</b>	<b>16,573</b>	<b>10,490</b>	<b>16,726</b>	<b>28,424</b>	
<b>Bunker Hill Creeks</b>															
Arrowhead Water & Power West Twin Crk								50	50	50	50	40	40	43	
Arrowhead Water & Power East Twin Crk								2,500	1,750	1,700	1,725	3	200	532	
Devore Water Company Kimbark								29	97	80	62	68	68	67	
<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>1,897</b>	<b>80</b>	<b>62</b>	<b>68</b>	<b>68</b>	<b>68</b>	<b>641</b>	
<b>Santa Ana River</b>															
Bear Valley Mutual WC	36,632	30,245	29,498	26,301	23,458	12,633	11,227	12,516	17,689	11,560	13,519	7,303	7,000	21,319	
Redlands Water Co	NA	981	1,044	884	1,044	1,474	1,000	975							
SBVWCD SAR Spreading									27,841	14,476	4,002	17,550	8,456	21,662	15,665
SBVWCD-DWR-SAR									0	5,855	1,993	0	981	1,115	1,657
<b>Subtotal</b>	<b>36,632</b>	<b>30,245</b>	<b>29,498</b>	<b>26,301</b>	<b>23,458</b>	<b>12,633</b>	<b>11,227</b>	<b>41,338</b>	<b>39,064</b>	<b>2,314</b>	<b>14,563</b>	<b>17,233</b>	<b>29,662</b>	<b>39,616</b>	

NA = Data Not Available

Source: Calendar year totals from Western Municipal Water District

Total = 80,452

**Engineering Investigation  
of the  
Bunker Hill Basin  
2010-2011**

**Appendices**



Appendices

**Water Level Elevations for the Bunker Hill Basin**  
 (Fall 2009 and Fall 2010)

Recordation Number	State Well Number	Well Name	Owner Or Measuring Agency	2009				2010				Difference Fall 2009 to Fall 2010	AGRI or Non AGRI Status
				Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured	Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured		
9900045	1S4W23H	#52 Brier/Gould/Tippecanoe	San Bernardino, City of / shallow wells	1897.2	197.42	1699.8	10_19_2009	1055.0	38.00	1055.0	11_24_2010	159.4	
		WS23	Colton, City of		84	-84.0	12_2009		0.0	0.0	12_2010	84.0	
9900053	1N4W23Q04S	40th St on Levee	U.S. Geological Survey/SBVMWD	1345.0	146.62	1198.4	10_21_2008	1345.0	113.38		10_13_2010	33.2	
9900028	1N4W35K	#26, Mecham Well	San Bernardino, City of / shallow wells	1105.0	257.3	847.7	10_27_2009	1105.0	241.6	1105.0	12_15_2010	15.7	
3601993	1N5W34B01S	Rialto 2 (Highland)	Rialto, City of	1445.0	450.00	1559.0	11_2009	1430.0	435.0	995.0	10_2010	15.0	
	01S/04W-11K005S	Lena Road 2	U.S. Geological Survey/SBVMWD	1030.00	75.29	954.7	10_11_2007	1030.00	67.45	962.6	10_13_2010	7.8	
3603537	1S5W14B01S	Chino #2	Rialto, City of	1137.0	406	1038.0	12_2009	1137	402	735.0	12_2010	4.0	
3601532	1S4W28N05S	RN #17	Riverside Highland Water Company	930.2	99.0	831.2	10_02_2009	930.2	95	835.2	12_02_2010	4.0	
9900061	1N5W21K04S	Upper Linden Ponds	U.S. Geological Survey/SBVMWD	1645.0	415.26	1229.7	11_10_2009	1645.0	413.2	1231.8	10_14_2010	2.1	
9900104	1S4W10B04S	San Bernardino/Multi	U.S. Geological Survey/SBVMWD	1017.7	61.73	956.0	11_6_2009	1017.7	60.4	957.4	10_4_2010	1.4	
3601534	1S4W28L02S	RN #20	Riverside Highland Water Company	940.3	90	850.3	10_2_2009	940.3	89	851.3	10_01_2010	1.0	
244701	01S/04W-23G	#60, Brier & Gifford	San Bernardino, City of / shallow wells	1040.00	35.40	1004.6	10_27_2009	1040.00	35.0	1040.0	12_15_2010	0.4	
		Geo	Colton, City of		89	-89.0	12_2009		89.0	-89.0	12_2010	0.0	
3602255	1S4W27L01S	Katz Well	Colton, City of	987.0			12_2009	987.0			12_2010		
		RV.Wll	Colton, City of				12_2009				12_2010		
	01N/04W-01G001S	29	East Valley Water District	1101.56				1101.56		1101.6		0.0	
	01N/03W-19B	61	East Valley Water District	1800.00				1800.00		1800.0		0.0	
	01N/04W-36K007S	1A, Fisher	East Valley Water District	1121.48				1121.48		1121.5		0.0	
	01N/04W-23E001S	Del Rosa Mutual #2	East Valley Water District	1295.00				1295.00		1295.0		0.0	
	01S/03W-34Q	Dr. Roberts Well	East Valley Water District	1424.37				1424.37		1424.4		0.0	
9900001	1S4W25M03S	Fairfax Well	East Valley Water District	1210.0		1210.0		1210.0				0.0	
	01S/03W-03D003S	Hunter	East Valley Water District	1284.14				1284.14		1284.1		0.0	
	01N/03W-30C002S	Jester (ESBCWD#36)	East Valley Water District	1355.60				1355.60		1355.6		0.0	
	01S/04W-02A005S	Myers (#105)	East Valley Water District	1087.00				1087.00		1087.0		0.0	
	01N/04W-25P004S	Pumalo	East Valley Water District	1190.38				1190.38		1190.4		0.0	
	01N/03W-19E001S	Raleigh-Watson	East Valley Water District	1460.00				1460.00		1460.0		0.0	
	01S/03W-004R(3N7)	Rozema	East Valley Water District	1240.00				1240.00		1240.0		0.0	
	01N/05W-15K001S	# 9	Fontana Water Company	1592.10				1592.10		1592.1		0.0	
	01N/05W-15K	#10	Fontana Water Company	1599.20				1599.20		1599.2		0.0	
	01S/04W-23A006S	98-1	Gage Canal Co.	1046.70	39.50	1,007.20	38,416.00	1046.70		1046.7		0.0	
3601510	1S4W21N01S	#36	Meeks & Daley Water Co	964.8		964.8		964.8		964.8		0.0	
3602253	1N5W27D01S	Rialto 1 (Cedar)	Rialto, City of	1535.0	534	656.4	12_2009	1137.0	534.0	603.0	12_2010	0.0	
3601531	1S4W33B05S	RN #16	Riverside Highland Water Company	945.5	80	865.5	10_2_2009	945.5	80	865.5	10_01_2010	0.0	
	01S/04W-22N002S	Bunker Hill Dike 3	Riverside, City of	981.31				981.31		981.3		0.0	
	01S/04W-22E005S	Bunker Hill Dike 4	Riverside, City of	975.70				975.70		975.7		0.0	
	01S/04W-09N003S	Bunker Hill Dike 5	Riverside, City of	960.28				960.28		960.3		0.0	
	01S/04W-27C007S	Bunker Hill Dike 6	Riverside, City of	991.78				991.78		991.8		0.0	
	01S/04W-22L012S	Bunker Hill Dike 9	Riverside, City of	979.06				979.06		979.1		0.0	
454501	01S/04W-27A002S	Hunt 2	Riverside, City of	1016.00	101.0	915.00	9_2007	1016.00		1016.0		0.0	
	01S/04W-22L017S	Martinez 2	Riverside, City of	982.00				982.00		982.0		0.0	
3601482	1S4W28C01S	Meeks	Riverside, City of	948.6		948.60		948.6		948.6		0.0	
3602208	1S4W28D01S	Mill	Riverside, City of	943.0		943.03		943.0	85.8	857.2	09_22_2010	0.0	
	01S/04W-22A	Payne	Riverside, City of	982.00				982.00		982.0		0.0	
Find Lat long		INTER CITY IRRIGATION	San Bernardino, City of	1029	132.5	896.5	12_16_2009	1029		1029.0		0.0	
Find Lat long	01S/04W-15E	Station 66	San Bernardino, City of	990.00				990.00				0.0	
246201	01S/04W-11E	#13, Rialto & San Felipe	San Bernardino, City of / shallow wells	1030.00				1030.00		1030.0		0.0	
	01S/04W-22C	#21,Wastewater N MW #1	San Bernardino, City of / shallow wells	988.00				988.00		988.0		0.0	
	01S/04W-22B	#22,Wastewater S MW #3	San Bernardino, City of / shallow wells	992.00				992.00		992.0		0.0	
245201	01S/04W-13E	#27, Central/Tippecanoe	San Bernardino, City of / shallow wells	1060.00				1060.00		1060.0		0.0	
245401	01S/04W-12B	#28, 3rd st & Shirley	San Bernardino, City of / shallow wells	1090.00				1090.00		1090.0		0.0	
245501	01N/04W-35N	#29,Baseline Peppertree	San Bernardino, City of / shallow wells	1090.00				1090.00		1090.0		0.0	
9900040	1S4W15C	#3 Mill & Arrowhead	San Bernardino, City of / shallow wells	997.0		997.0		997.0		997.0		0.0	
245801	01N/04W-32Q	#30, Baseline & Muscott	San Bernardino, City of / shallow wells	1170.00				1170.00		1170.0		0.0	

**Water Level Elevations for the Bunker Hill Basin**  
(Fall 2009 and Fall 2010)

Recordation Number	State Well Number	Well Name	Owner Or Measuring Agency	2009				2010				Difference Fall 2009 to Fall 2010	AGRI or Non AGRI Status
				Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured	Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured		
	01S/04W-07H	#31, Rancho & Rialto	San Bernardino, City of / shallow wells	1120.00				1120.00		1120.0		0.0	
245901	01S/04W-10D	#32, City Hall	San Bernardino, City of / shallow wells	1040.00	27.70	1012.3	2_25_2009	1040.00		1040.0		0.0	
	01S/04W-03Q	#34a ,S.B. County/1	San Bernardino, City of / shallow wells	1040.00				1040.00		1040.0		0.0	
	01S/04W-03Q	#34b ,S.B. County/1	San Bernardino, City of / shallow wells							#VALUE!		0.0	
	01S/04W-10B	#36b, S.B. County/6	San Bernardino, City of / shallow wells	1025.00				1025.00		1025.0		0.0	
	01S/04W-03Q	#37, Heap Well	San Bernardino, City of / shallow wells	1040.00				1040.00		1040.0		0.0	
245501	01S/04W-11C	#42, 4th St & Palm Ave.	San Bernardino, City of / shallow wells	1045.00	36.30	1008.7	10_27_2009	1045.00		1045.0		0.0	
245901	01S/04W-03J	#43, 7th St & Waterman	San Bernardino, City of / shallow wells	1050.00				1050.00		1050.0		0.0	
245201	01S/04W-02N	#44, Ward & Cooley	San Bernardino, City of / shallow wells	1045.00				1045.00		1045.0		0.0	
	01S/04W-22F	#49, Wastewtr Brine D	San Bernardino, City of / shallow wells	985.00				985.00		985.0		0.0	
9900044	1S4W16J	#5 Inland Center	San Bernardino, City of / shallow wells	1020.0	20.3	999.7	1_28_2009	1020.0		1020.0		0.0	
9900124	1S4W22M	#51, McKay & S "E" St	San Bernardino, City of / shallow wells	978.0		978.0		978.0		978.0		0.0	
9900049	1S4W27B	#54, Club Center/Hunts Ln	San Bernardino, City of / shallow wells	990.0	24.9	965.1	2_25_2009	990.0		990.0		0.0	
9900047	1S4W23L	#56 Vanderbilt/Carnegie	San Bernardino, City of / shallow wells	1020.0		1020.0		1020.0		1020.0		0.0	
245801	01S/04W-09K	#61, Valley & "G"	San Bernardino, City of / shallow wells	1040.00				1040.00		1040.0		0.0	
246201	01S/04W-15G	#65, Washington/Central	San Bernardino, City of / shallow wells	1002.00				1002.00		1002.0		0.0	
245401	01S/04W-23D	#67, S. Wtrman & Dumas	San Bernardino, City of / shallow wells	1010.00				1010.00		1010.0		0.0	
9900042	1S4W22P	#8 Hospitality & Sunwest	San Bernardino, City of / shallow wells	982.0	23.6	958.4	1_28_2009	982.0		982.0		0.0	
9900054	1N4W23R05S	40st St on levee	U.S. Geological Survey/SBVMWD	1268.0	104.8	1163.2		1268.0				0.0	
9900122	1N4W23G03S	40th St on Levee	U.S. Geological Survey/SBVMWD	1284.4	104.80	1179.6	10_31_2007	1284.4				0.0	
9900095	1S4W03Q01S	5th/Sierra Way	U.S. Geological Survey/SBVMWD	1041.8		1041.8		1041.8	552.78		10_14_2010	0.0	
9900073	1N5W28J03S	Bohnert/Vinyard	U.S. Geological Survey/SBVMWD	1512.0		1512.0		1512.0				0.0	
9900143	2N5W33J04S	Cajon Wash	U.S. Geological Survey/SBVMWD	2010.0		2010.0		2010.0				0.0	
9900089	IS3W19G02S	Calif/Lugonia	U.S. Geological Survey/SBVMWD	1135.0		1135.0		1135.0				0.0	
9900120	IS5W22M03S	Cedar	U.S. Geological Survey/SBVMWD	1090.0		1090.0		1090.0	89.80		10_13_2010	0.0	
3601853	1S2W36N01S	Cedar Ave. (YVWD 5)	U.S. Geological Survey/SBVMWD	2559.0		2559.0		2559.0	344.63		10_14_2010	0.0	
9900128	1S4W16P04S	Colton Ave	U.S. Geological Survey/SBVMWD	1016.8		1016.8		1016.8				0.0	
	01S/02W-30C001S	Colton/Opal	U.S. Geological Survey/SBVMWD	1649.00				1649.00		1649.0		0.0	
9900139	1S2W07R01S	Cone Camp	U.S. Geological Survey/SBVMWD	1680.0	260.45	1419.6	11_1_2007	1680.0				0.0	
9900077	1N5W29Q04S	County Landfill	U.S. Geological Survey/SBVMWD	1540.0		1540.0		1540.0				0.0	
9900078	1N5W29Q05S	County Landfill	U.S. Geological Survey/SBVMWD	1540.0		1540.0		1540.0				0.0	
	01S/04W-10F001S	D & 2nd Streets	U.S. Geological Survey/SBVMWD	1029.70	99.39	930.3	10_29_2007	1029.70		1029.7		0.0	
9900050	1N3W19R02S	Del Rosa	U.S. Geological Survey/SBVMWD	1477.0	13.73	1463.3	10_21_2008	1477.0				0.0	
	01S/03W-09E002S	E. of Norton AFB	U.S. Geological Survey/SBVMWD	1190.00	201.84	988.2	10_30_2007	1190.00		1190.0		0.0	
9900005	1S3W10J02S	E. Orange St. (Sunwest Materials)	U.S. Geological Survey/SBVMWD	1308.0		1308.0		1308.0				0.0	
	02N/05W-33K001S	Glen Helen	U.S. Geological Survey/SBVMWD	2020.00	83.48	1936.5	10_29_2007	2020.00		2020.0		0.0	
	01S/03W-02P002S	Greenspot Rd.	U.S. Geological Survey/SBVMWD	1345.30				1345.30		1345.3		0.0	
	01N/03W-31Q002S	Harlem Springs	U.S. Geological Survey/SBVMWD	1120.00				1120.00		1120.0		0.0	
	01N/03W-27N001S	Highland Ave	U.S. Geological Survey/SBVMWD	1470.00				1470.00		1470.0		0.0	
9900091	1S3W35G05S	Highland/Roosevelt	U.S. Geological Survey/SBVMWD	1534.9	23.13	1511.8	11_1_2007	1534.9				0.0	
9900052	1N4W21B02S	Kendall	U.S. Geological Survey/SBVMWD	1322.4	156.37	1166.0	10_29_2007	1322.4				0.0	
9900088	1S2W30B03S	King St.	U.S. Geological Survey/SBVMWD	1709.2	83.85	1625.3	11_1_2007	1709.2				0.0	
9900056	1N5W06F01S	Lytle Creek Wash	U.S. Geological Survey/SBVMWD	2242.5	306.53	1935.9	4_16_2007	2242.5				0.0	
9900105	1S4W19E01S	Meridian/Valley	U.S. Geological Survey/SBVMWD	1041.0		1041.0		1041.0				0.0	
3603539	1S2W24C01S	N. Juniper Ave. (YVWD 51)	U.S. Geological Survey/SBVMWD	2735.0		2735.0		2735.0				0.0	
9900141	1N3W34L01S	NE of Boulder/Baseline	U.S. Geological Survey/SBVMWD	1346.00	306.53	1039.5		1346.00				0.0	
	01N/03W-34L001S	NE of Boulder/Baseline	U.S. Geological Survey/SBVMWD	1346.00	306.53	1039.5	4_16_2007	1346.00		1346.0		0.0	
	01N/03W-33C001S	Near Highland & Palm	U.S. Geological Survey/SBVMWD	1424.00	440.5	983.5	10_31_2007	1424.00		1424.0		0.0	
	01N/03W-29N001S	Near Patton State Hospital	U.S. Geological Survey/SBVMWD	1291.00	326.50	964.5	4_19_2007	1291.00		1291.0		0.0	
9900140	1N3W32N01S	Near Victoria & Baseline	U.S. Geological Survey/SBVMWD	1143.0		1143.0		1143.0				0.0	
0000086	1S4W12B04S	Norton AFB	U.S. Geological Survey/SBVMWD	1087.0	183.58	903.4	10_30_2007	1087.0				0.0	
9900129	1S4W17R01S	Olive Street	U.S. Geological Survey/SBVMWD	1012.9		1012.9		1012.9				0.0	
	01N/03W-32C002S	Patton #11	U.S. Geological Survey/SBVMWD			0.0				0.0		0.0	

**Water Level Elevations for the Bunker Hill Basin**  
(Fall 2009 and Fall 2010)

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				Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured	Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured		
9900051	1N3W29M02S	Patton Hospital	U.S. Geological Survey/SBVMWD	1344.0		1344.0		1344.0				0.0	
9900121	2S2W18N01S	Redland Blvd/San Tim Rd	U.S. Geological Survey/SBVMWD	1805.0		1805.0		1805.0		1805.0		0.0	
9900137	IS4W22R07S	Redlands Blvd.	U.S. Geological Survey/SBVMWD	1010.0	95.8	914.2	10_31_2007	1010.0				0.0	
9900057	IN5W17K03S	Rialto-Riverside Ave	U.S. Geological Survey/SBVMWD	1860.0		1860.0		1860.0				0.0	
3601485	1S4W29R01S	SAR in Colton	U.S. Geological Survey/SBVMWD	931.2		931.2		931.2				0.0	
3601484	1S4W29H01S	SAR in Colton (Flume 2)	U.S. Geological Survey/SBVMWD	932.2		932.2		932.2				0.0	
3601486	1S4W29Q03S	SAR in Colton (Flume 4)	U.S. Geological Survey/SBVMWD	928.1		928.1		928.1	551.74		10_14_2010	0.0	
9900130	IS4W21K11S	Vaceria	U.S. Geological Survey/SBVMWD	961.0		961.0		961.0				0.0	
9900087	IS2W09P01S	W. of Emerald Rd	U.S. Geological Survey/SBVMWD	2130.0		2130.0		2130.0				0.0	
9900090	IS3W31A03S	Whittier Ave.	U.S. Geological Survey/SBVMWD	1209.0	204	1005.0	2_1_2009	1209.0				0.0	
9900131	IS5W03A02S	#33 Shop	West Valley Water District	1360.0		1360.0		1360.0		1360.0		0.0	
9900132	IS5W20N	#37 Palmetto	West Valley Water District	1101.0		1101.0		1101.0		1101.0		0.0	
9900133	IS5W22M02S	#39 Cedar	West Valley Water District	1085.0		1085.0		1085.0		1085.0		0.0	
3600309	IS5W02C01S	10/Brill	West Valley Water District	1346.7	366	980.7	12_1_2009	1346.7		1346.7		0.0	
3600311	IS5W02K01S	11/Willow	West Valley Water District	1287.0	311.0	976.0	12_1_2009	1287.0		1287.0		0.0	
3601001	IS5W12L01S	16/Boyd	West Valley Water District	1177.2	251	926.2	12_1_2009	1177.2		1177.2		0.0	
3600995	IS5W12N01S	17/Acacia	West Valley Water District	1173.7		1173.7		1173.7		1173.7		0.0	
9900134	IS5W29A01S	20/Slover 2	West Valley Water District	1082.4		1082.4		1082.4		1082.4		0.0	
3601689	IN5W17K01S	21B/Fontana RNCHS 1	West Valley Water District	1851.0		1851.0		1851.0				0.0	
3601690	IN5W28J01S	22/Fontana RNCHS 2	West Valley Water District	1514.2		1514.2		1514.2				0.0	
3601691	IN5W17G01S	23/Fontana RNCHS 3	West Valley Water District	1850.0		1850.0		1850.0				0.0	
3601931	IN5W17K02S	24/Fontana RNCHS 4	West Valley Water District	1854.1		1854.1		1854.1		1854.1		0.0	
3601434	IS5W34D01S	25/Park 44A	West Valley Water District	998.2		998.2		998.2				0.0	
3600074	IS5W23Q01S	29/Cram-Wright	West Valley Water District	1020.0		1020.0		1020.0		1020.0		0.0	
Find Lat long	01S/03W-09E002S	E. of Norton AFB	West Valley Water District	1190.00	201.84	1090.00	10_30_2007	1190.00		1190.0		0.0	
9900115	IS4W22D07S	Orangeshow & "E" St.	U.S. Geological Survey/SBVMWD	977.5	45.01	932.5	11_20_2009	977.5	45.1	932.4	11_3_2010	-0.1	
9900071	IN5W27D04S	City of Rialto Tanks	U.S. Geological Survey/SBVMWD	1543.0	246.44	1296.6	11_4_2009	1543.0	246.5	1296.5	11_23_2010	-0.1	
	01S/04W-10K003S	Burbank Elementary	U.S. Geological Survey/SBVMWD	1005.00	65.43	939.6	10_11_2007	1005.00	65.51	939.5	10_13_2010	-0.1	
9900067	IN5W22N06S	Lower Linden Ponds	U.S. Geological Survey/SBVMWD	1580.0	137.93	1442.1	11_10_2009	1580.0	138.0	1442.0	11_15_2010	-0.1	
	01S/04W-22B011S	Treatment Plant	U.S. Geological Survey/SBVMWD	995.00	40.43		2_1_2007	995.00	40.60	954.4	11_15_2010	-0.2	
266701	01S/02W-07Q006S	Cone Camp	U.S. Geological Survey/SBVMWD	1639.04	72.57	1566.5	10_26_2007	1639.04	72.76	1566.3	10_13_2010	-0.2	
0000023	IS3W17C03S	Daniel's Well	Riverside, City Of-Gage Canal	1180.8	211.5	969.3	11_8_2009	1180.8	212.00	968.75	11_20_2010	-0.5	
9900041	IS4W23Q	#58 Hospitality/Harriman	San Bernardino, City of / shallow wells	1027.8	21.9	1005.9	10_27_2009	1027.8	22.5	1005.3	12_15_2010	-0.6	
9900046	IS4W23L	#53 Brier/Carnegie #2	San Bernardino, City of / shallow wells	1035.0	31.8	1003.2	10_27_2009	1035.0	32.7	1035.0	12_15_2010	-0.9	
Find Lat long	02S04W05F03S	RN #6	Riverside Highland Water Company	948.00	185	763	11_30_2009	948	186	762.0	11_02_2010	-1.0	
9900043	IS4W22I	#55 Airport/Commercenter E	San Bernardino, City of / shallow wells	1005.0	22.5	982.5	10_27_2009	1005.0	23.5	1005.0	12_15_2010	-1.0	
9900048	IS4W23N	#59 Hospitality/E Carnegie	San Bernardino, City of / shallow wells	1020.0	48.7	971.3	10_27_2009	1020.0	49.8	970.2	12_15_2010	-1.1	
9900110	IS4W20H05S	Colton Plunge Park	U.S. Geological Survey/SBVMWD	990.0	119.76	870.2	11_20_2009	990.0	121.1	869.0	11_16_2010	-1.3	
9900021	IS3W09E02S	Tri-City Concrete	East Valley Water District	1195.4	215.6	979.8	11_3_2009	1195.4	217.2	978.2	10_4_2010	-1.6	
	01S/04W-03N006S	Feldheim Library 2	U.S. Geological Survey/SBVMWD	1060.00	99.23	960.8	10_12_2007	1060.00	100.83	959.2	10_13_2010	-1.6	
9900083	IN5W35B01S	Easton Reservoir	U.S. Geological Survey/SBVMWD	1405.0	324.04	1081.0	11_10_2009	1405.0	325.7	1079.3	11_30_2010	-1.6	
9900084	IN5W35B02S	Easton Reservoir	U.S. Geological Survey/SBVMWD	1405.0	324.06	1080.9	11_10_2009	1405.0	325.7	1079.3	11_30_2010	-1.6	
9900086	IN5W35B04S	Easton Reservoir	U.S. Geological Survey/SBVMWD	1405.0	309.55	1095.5	11_10_2009	1405.0	311.2	1093.8	11_30_2010	-1.6	
9900085	IN5W35B03S	Easton Reservoir	U.S. Geological Survey/SBVMWD	1405.0	308.38	1096.6	11_10_2009	1405.0	310.1	1094.9	11_30_2010	-1.8	
3601790	IS4W32M04S	LC #3	Riverside Highland Water Company	925.0	110	815.0	11_30_2009	925.0	112	813.0	10_01_2010	-2.0	
3601526	2S4W06R01S	RN #7	Riverside Highland Water Company	946.9	142	804.9	11_4_2009	946.9	144	802.9	12_02_2010	-2.0	
9900101	IS4W08E04S	Rialto Avenue	U.S. Geological Survey/SBVMWD	1110.0	220.72	889.3	11_6_2009	1110.0	222.8	887.2	10_4_2010	-2.1	
9900060	IN5W21K03S	Upper Linden Ponds	U.S. Geological Survey/SBVMWD	1645.0	408.81	1236.2	11_10_2009	1645.0	411.1	1234.0	10_14_2010	-2.2	
3603796		MidAquifer Pump B	Southern California Edison		181.79	-181.8	10_2009		184.5	-184.5	11_2010	-2.8	Non-Agricultural
	01S/04W-15F008S	Orange Show	U.S. Geological Survey/SBVMWD	990.00	51.46	938.5	9_12_2007	990.0					

**Water Level Elevations for the Bunker Hill Basin**  
 (Fall 2009 and Fall 2010)

Recordation Number	State Well Number	Well Name	Owner Or Measuring Agency	2009				2010				Difference Fall 2009 to Fall 2010	AGRI or Non AGRI Status
				Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured	Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured		
9900072	1N5W28J02S	Bohnert/Vineyard	U.S. Geological Survey/SBVMWD	1512.0	404.8	1107.2	10_1_2009	1512.0	410.2	1101.8	11_23_2010	-5.4	
Find Lat long	IS4W23A01S	Santa Fe	Riverside, City Of-Gage Canal	1044.7	168	876.7	11_8_2009	1044.7	174.00	870.7	11_21_2010	-6.0	
3601014		Deep Well Pump 2	Southern California Edison		227.71	-227.7	11_2009		233.7	-233.7	11_2010	-6.0	Non-Agricultural
9900136	IS4W22J04S	Commerce Center	U.S. Geological Survey/SBVMWD	997.7	34.02	963.7	10_26_2007	997.7	40.1	957.6	11_3_2010	-6.1	
9900076	1N5W29Q03S	County Landfill	U.S. Geological Survey/SBVMWD	1540.0	547.13	992.9	11_10_2009	1540.0	553.4	986.6	11_15_2010	-6.3	
9900069	1N5W27D02S	City of Rialto Tanks	U.S. Geological Survey/SBVMWD	1543.0	415.03	1128.0	11_4_2009	1543.0	421.5	1121.5	11_23_2010	-6.5	
3601015		Deep Well Pump 1	Southern California Edison		228.6	-228.6	11_2009		235.2	-235.2	11_2010	-6.6	Non-Agricultural
9900082	1N5W34D04S	Rialto Airport	U.S. Geological Survey/SBVMWD	1460.0	475.28	984.7	11_10_2009	1460.0	481.90	978.1	11_30_2010	-6.6	
3301655	2S4W08M01S	RN #21	Riverside Highland Water Company	1001.0	191	810.0	10_2_2009	1001.0	198	803.0	11_02_2010	-7.0	
3301656	2S4W08M02S	RN #22	Riverside Highland Water Company	984.2	177	807.2	10_2_2009	984.2	184	800.2	11_02_2010	-7.0	
9900119	IS5W11F04S	Lilac Park	U.S. Geological Survey/SBVMWD	1244.0	273.16	970.8	11_6_2009	1244.0	280.5	963.5	11_1_2010	-7.4	
	01S/04W-15R03S	ANDERSON	San Bernardino, City of	1013	114.4	898.6	12_16_2009	1013	121.9	891.1	10_20_2010	-7.5	
3602182	IS4W28K02S	CR #4A	Riverside Highland Water Company	948.0	70.0	878.0	10_2_09	948.0	78.0	870.0	12_02_2010	-8.0	
9900097	IS4W04E06S	Garner Park	U.S. Geological Survey/SBVMWD	1121.3	211.08	910.2	11_6_2009	1121.3	220.2	901.1	10_4_2010	-9.1	
3602558	1N5W34M01S	Rialto 3 (Airport)	Rialto, City of	1417.0	432	985.0	11_2009	1417.0	442.0	975.0	11_2010	-10.0	
9900059	1N5W21K02S	Upper Linden Ponds	U.S. Geological Survey/SBVMWD	1645.0	408.16	1236.8	11_10_2009	1645.0	418.4	1226.6	11_15_2010	-10.2	
9900058	1N5W21K01S	Upper Linden Ponds	U.S. Geological Survey/SBVMWD	1645.0	407.91	1237.1	11_10_2009	1645.0	418.4	1226.7	11_15_2010	-10.4	
Find Lat long	IS4W23K03S	Upper Kelly	Riverside, City Of-Gage Canal	1044.3	162	882.3	11_8_2009	1044.3	173.00	871.3	11_21_2010	-11.0	
3603795		Mid Aquifer Pump A	Southern California Edison		192.16	-192.2	10_2009		203.4	-203.4	12_2010	-11.3	Non-Agricultural
9900075	1N5W29Q02S	County Landfill	U.S. Geological Survey/SBVMWD	1540.0	537.24	1002.8	11_10_2009	1540.0	548.9	991.1	3_18_2010	-11.7	
9900138	IS3W15K01S	Church St.(Riverview)	U.S. Geological Survey/SBVMWD	1378.8	193.46	1185.3	10_26_2007	1378.8	212.5	1166.3	10_13_2010	-19.0	
9900068	1N5W26L01S	Hugh Banks	U.S. Geological Survey/SBVMWD	1455.0	247.23	1207.8	11_4_2009	1455.0	349.0	1106.0	11_24_2010	-101.8	
	01S/04W-14E013S	Mill Center 2	U.S. Geological Survey/SBVMWD	1020.00	46.68	973.3	10_11_2007	1020.00	150.52	869.5	11_4_2010	-103.8	
9900055	IN4W35L01S	16th & Crestview	U.S. Geological Survey/SBVMWD	1128.0	229.3	898.7	2_25_2009	1128.0	348.93		10_21_2010	-119.6	
3603792	01N/05W-03A	CAJON 4	San Bernardino, City of	1923	189.7	1733.3	12_15_2009	1923	151.5	1771.5	12_13_2010	38.2	
3603791	02N/05W-19R05S	KENWOOD 2	San Bernardino, City of	2289	119.8	2169.2	12_15_2009	2289	91.2	2197.8	12_15_2010	28.6	
	01N/04W-08M001S	Cal State	U.S. Geological Survey/SBVMWD	1530.00	162.18	1367.8	10_29_2007	1530.00	137.22	1392.8	11_4_2010	25.0	
3603471	02N/05W-19R01S	KENWOOD 1	San Bernardino, City of	2350.8	114.5	2236.3	12_15_2009	2350.8	92.8	2258.0	12_15_2010	21.7	Non-Agricultural
3602844	2N4W08M01S	Devil Canyon #5	San Bernardino, City of	1549.0	172.30	1376.7	10_20_2009	1549.0	151.2	1397.8	10_19_2010	21.1	Non-Agricultural
3600712	IN4W08M01S	Devil Canyon #1	San Bernardino, City of	1530.0	162.50	1367.5	10_19_2009	1530.0	144	1386.0	10_14_2010	18.5	Non-Agricultural
3602426	2N5W19Q01	Vincent Well	San Bernardino, City of	2314.3	74.5	2239.8	12_15_2009	2314.3	56.7	2257.6	12_15_2010	17.8	Non-Agricultural
3600710	2N5W19K02S	Cajon Canyon Well	San Bernardino, City of	2331.9	68.20	2263.7	12_15_2009	2331.9	56.1	2275.8	12_15_2010	12.1	Non-Agricultural
3602712	IN4W08P01S	Ellena Bros.	San Bernardino, City of	1478.0	175.1	1302.9	10_20_2009	1478.0	166	1312.0	10_19_2010	9.1	
3600711	IN4W07F01S	Devil Canyon #2	San Bernardino, City of	1622.0	160.10	1461.9	12_15_2009	1622.0	153.3	1468.7	10_18_2010	6.8	Non-Agricultural
3602206	IN4W06H02S	Devil Canyon #3	San Bernardino, City of	1888.5	28.40	1860.1	10_20_2009	1888.5	26.9	1861.6	12_15_2010	1.5	
3603580	01N/04W-06A001S	DEVIL CANYON 6	San Bernardino, City of	2042	18.5	2023.5	12_15_2009	2042	18	2024.0	11_22_2010	0.5	
3602205	IN4W06H01S	Devil Canyon #4	San Bernardino, City of	1903.4	41.40	1862.0	12_15_2009	1903.4	41.2	1862.2	12_15_2010	0.2	
3602383	02N/05W-28C002S	2A	Devore Water Company	2475.00	68.8	2,406.20	11_30_2009	2475.00		2475.0		0.0	Non-Agricultural
3602384	02N/05W-28C003S	3 (3a)	Devore Water Company	2466.00	60	2,406.00	11/29/03	2466.00		2466.0		0.0	Non-Agricultural
3603792	01N/05W-03A	Cajon Well #4	San Bernardino, City of	1923.00	165.5	1757.5	2_23_2009	1923.00				0.0	
	01N/04W-08P001S	Cal State	U.S. Geological Survey/SBVMWD	1476.66	173.52	1303.1	10_29_2007	1476.66		1476.7		0.0	
3603579	01N/04W-06A02 S	DEVIL CANYON 7	San Bernardino, City of	2037	18.5	2018.5	12_15_2009	2037	21	2016.0	11_22_2010	-2.5	
3604006	01S/04W-08R	27	Colton, City of	1078.5	238	840.5	12_2009	1078.5	200.0	878.5	10_2010	38.0	
3601844	IN5W03H02S	Cajon Well #2	San Bernardino, City of	1897.2	190.90	1706.3	12_15_2009	1897.2	153	1744.2	12_13_2010	37.9	Non-Agricultural
3602821	IN5W03A02S	Cajon Well #3	San Bernardino, City of	1894.0	184.80	1709.2	12_14_2009	1894.0	147.5	1746.5	12_13_2010	37.3	Non-Agricultural
3603													

**Water Level Elevations for the Bunker Hill Basin**  
(Fall 2009 and Fall 2010)

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				Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured	Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured		
3601257	01S04W08F007S	13	Colton, City of	1095.1	225	870.1	11_2009	1095.1	221.0	874.1	12_2010	4.0	Non-Agricultural
3603538	IS4W06H03S	City 4	Rialto, City of	1158.0	236.00	922.0	12_2009	1158.0	232.0	926.0	12_2010	4.0	Non-Agricultural
	30	Colton, City of		103	-103.0	12_2009		100.0	-100.0	12_2010		3.0	
3601260	IS4W08F01S	16	Colton, City of	1096.2	239	857.2	12_2009	1096.2	238.0	858.2	12_2010	1.0	Non-Agricultural
3603030	IS4W06B01S	City 5	Rialto, City of	1211.0	319.00	892.0	12_2009	1211.0	318.0	893.0	12_2010	1.0	Non-Agricultural
3601251	IS4/W-08R05S	5	Colton, City of	1076.0		1076.0		1076.0				0.0	Non-Agricultural
3601253	01S04W08Q001S	7	Colton, City of	1075.8		1075.8		1075.8		1075.8		0.0	
3601254	001S004W08F	8	Colton, City of	1096.5			12_2009	1096.5			12_2010	#VALUE!	Non-Agricultural
3601258	IS4W08R04S	14	Colton, City of									0.0	Non-Agricultural
3602498	01S04W005R	6B	Colton, City of	1075.0		1075.0		1075.0				0.0	
3602428	02N/05W-34E001S	4	Devore Water Company	2020.00	156.8	1,863.20	12_17_2009	2020.00		2020.0		0.0	Non-Agricultural
3600717	1N4W32D03S	19th Street No. 1	San Bernardino, City of	1236.3	305.4	930.9	10_21_2009	1231.0		1231.0		0.0	Non-Agricultural
3601843	1N5W03H01S	Cajon Well #1	San Bernardino, City of	1889.4		1889.4		1889.4				0.0	
	01N/04W-31A001S	Highland Ave.	U.S. Geological Survey/SBVWWD	1259.00	292.59	966.4	4_17_2007	1259.00		1259.0		0.0	
3601003	IS4W06H01S	13/Raynor 4	West Valley Water District	1160.0		1160.0		1160.0				0.0	
3604006	IS5W24M02S	18A/Slover-Mutual	West Valley Water District	1260.0		1260.0		1260.0		1260.0		0.0	Non-Agricultural
3603598	IS4W18N	24	Colton, City of	1100.8	227	873.8	12_2009	1100.8	228.0	235.0	12_2010	-1.0	
3602766	IS4W06H02S	30/New Raynor 4	West Valley Water District	1159.8	243	916.8	10_1_2009	1159.8	244	915.8	10_31_2010	-1.0	Non-Agricultural
9900026	1N4W20M	#50, Paperboard	San Bernardino, City of / shallow wells	1365.0	342	1023.0	9_28_2009	1365.0	343.5	1365.0	12_14_2010	-1.5	
3601259	IS4W18G01S	15	Colton, City of	1093.5	215	878.5	11_2009	1093.5	218.0	875.5	12_2010	-3.0	
3601261	IS4W18F	17	Colton, City of	1099.4	218	881.4	11_2009	1099.4	221.0	878.4	10_2010	-3.0	
3600718	1N4W32D04	19th St. No. 2	San Bernardino, City of	1236.3	305.70	930.6	10_21_2009	1236.3	309.7	926.6	11_24_2010	-4.0	Non-Agricultural
3600319	1N4W31A01S	Mt. Vernon	San Bernardino, City of	1258.8	319.2	939.6	9_15_2009	1258.8	323.8	935.0	10_19_2010	-4.6	
3604008	01S04W08Q	29	Colton, City of		178	-178.0	11_2009		183.0	-183.0	10_2010	-5.0	
3601848	IS4W05E05S	15/Raynor 5	West Valley Water District	1170.0	235.00	935.0	12_1_2009	1170.0	240.0	930.0	10_31_2010	-5.0	Non-Agricultural
G363790	01N/04W-32P-S	EPA EXTRAC WELL 112	San Bernardino, City of	1181.8	394.4	787.4	12_15_2009	1181.8	424	757.8	10_20_2010	-29.6	
3602881	IS4W27M01S	22	Colton, City of	1001.9	106	895.9	10_2009	1001.9	213.0	788.9	12_2010	-107.0	
	1			0				0	0			0	
3601288	IS1W11Q01S	Mill Creek #4	Redlands, City of	4575.0	108.0	4467.0	12_2009	4575.0	55	4520.0	11_2010	53.0	Non-Agricultural
228901	IS2W17E01S	Mill Ck Monitoring #4	San Bernardino Valley Water Cons. Dist.	1760.0	193.11	1566.9	11_17_2009	1760.0	143.49	1616.5	10_10_10	49.6	
453201	IS2W17E02S	Mill Ck Monitoring #5	San Bernardino Valley Water Cons. Dist.	1760.0	232.05	1528.0	11_17_2009	1760.0	182.89	1577.1	10_10_10	49.2	
3602792	IS2W19A01S	Agate #2	Redlands, City of	1720.0	182.0	1538.0	12_2009	1720.0	138	1582.0	12_2010	44.0	Non-Agricultural
3602896	IS2W20D01S	Madeira	Redlands, City of	1770.0	189.0	1581.0	11_2009	1770.0	152	1618.0	11_2010	37.0	Non-Agricultural
241801	IS2W17L02S	Mill Ck Monitoring #2	San Bernardino Valley Water Cons. Dist.	1800.0	184.16	1615.8	11_17_2009	1800.0	148.20	1651.8	10_10_10	36.0	
229101	IS2W07B01S	SBVVCD #1	San Bernardino Valley Water Cons. Dist.	1650.5	240.61	1409.9	11_17_2009	1650.5	207.17	1443.3	12_10_10	33.4	
3602791	IS2W20B01S	E. Lugonia #4	Redlands, City of	1831.6	129.0	1702.6	10_2009	1831.6	104	1727.6	10_2010	25.0	Non-Agricultural
228701	IS2W17L01S	Mill Ck Monitoring #1	San Bernardino Valley Water Cons. Dist.	1800.0	148.32	1651.7	11_17_2009	1800.0	123.46	1676.5	11_10_10	24.9	
3602654	IS2W19J02S	Crafton	Redlands, City of	1780.0	142.0	1638.0	11_2009	1780.0	121	1659.0	11_2010	21.0	Agricultural
3601282	IS1W08H01S	Mill Creek #1	Redlands, City of	3570.0	12.0	3558.0	12_2009	3570.0	0	3570.0		12.0	Non-Agricultural
229001	IS2W07K01S	SBVVCD #2	San Bernardino Valley Water Cons. Dist.	1646.4	158.64	1487.8	11_17_2009	1646.4	151.6	1494.8	12_10_10	7.0	
3601290	IS2W21D01S	E. Lugonia #6	Redlands, City of	1970.0	58.0	1912.0	10_2009	1970.0	51	1919.0	10_2010	7.0	Non-Agricultural
3603045	IS1W09J01S	Mill Creek #2A	Redlands, City of	3950.0	60.0	3890.0	12_2009	3950.0	54	3896.0	12_2010	6.0	Non-Agricultural
3601281	IS2W36F01S	Maguet #1	Redlands, City of	1955.0	21.0	1934.0	10_2009	1955.0	20	1935.0	10_2010	1.0	Non-Agricultural
3602799	IS2W07F01S	125	East Valley Water District	1600.0	248.5	1351.5	11_2_2009	1600.0		1600.0		0.0	Non-Agricultural
3601283	IS2W22C02S	E. Lugonia #2	Redlands, City of	2260.0		2260.0		2260.0		2260.0		0.0	Non-Agricultural
3601287	IS2W21B02S	E. Lugonia #3	Redlands, City of	2091.0	28.0	2063.0	12_2009	2091.0	28	2063.0	10_2010	0.0	Non-Agricultural
3600006	IS2W19G01S	E. Lugonia #5	Redlands, City of	1689.0		1689.0		1689.0		1689.0		0.0	Non-Agricultural
3602351	IS2W13A01S	Mill Creek #0A	Redlands, City of	2960.0				2960.0	11	2949.0	11_2010	0.0	Non-Agricultural
3600894	IS2W34P01S	Yucaipa Blvd.	Redlands, City of	2157.5		2157.5		2157.5		2157.5		0.0	Non-Agricultural
459301													

**Water Level Elevations for the Bunker Hill Basin**  
(Fall 2009 and Fall 2010)

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				Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured	Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured		
3601284	IS2W21E01S	Maguet #2	Redlands, City of	2016.9	35.0	1981.9	12_2009	2016.9	45	1971.9	10_2010	-10.0	Non-Agricultural
3601308	IS2W19K01S	Agate #1	Redlands, City of	1723.0	125.0	1598.0	12_2009	1723.0	140	1583.0	11_2010	-15.0	Agricultural
3601285	IS1W10L01S	Mill Creek #2	Redlands, City of	4140.0	59.0	4081.0	12_2009	4140.0	77	4063.0	12_2010	-18.0	Non-Agricultural
3601291	IS3W35G08S	Well #10	Redlands, City of	1565.8	41.0	1524.8	12_2009	1565.8	38	1527.8	11_2010	3.0	Non-Agricultural
3601296	IS3W35H03S	Well #16	Redlands, City of	1572.2	47.0	1525.2	12_2009	1572.2	44	1528.2	12_2010	3.0	Agricultural
3602082	2S3W03K01S	Well #36	Redlands, City of	1675.2	160.0	1515.2	12_2009	1675.2	157	1518.2	11_2010	3.0	Non-Agricultural
3601294	IS3W35G09S	Well #13	Redlands, City of	1577.2	66.0	1511.2	12_2009	1577.2	64	1513.2	12_2010	2.0	Non-Agricultural
3601295	IS3W35H04S	Well #14	Redlands, City of	1585.3	54.0	1531.3	12_2009	1585.3	52	1533.3	11_2010	2.0	Non-Agricultural
3601293	IS3W35H02S	Well #12	Redlands, City of	1568.0	41.0	1527.0	12_2009	1568.0	41	1527.0	12_2010	0.0	Non-Agricultural
3600238	IS2W29M01S	Crafton/Highland	U.S. Geological Survey/SBVMD	1851.8	205.24	1646.6	4_19_2007	1851.8				0.0	Agricultural
3600918	2S3W01E01S	Redlands Heights	Redlands, City of	1790.0	167.0	1623.0	12_2009	1790.0	170	1620.0	12_2010	-3.0	Non-Agricultural
3601292	IS3W35G07S	Well #11	Redlands, City of	1565.5	36.0	1529.5	11_2009	1565.5	40	1525.5	12_2010	-4.0	Non-Agricultural
3603734	01S/03W-02P006S	147	East Valley Water District	1362.00	503	859.00	10_2009	1362.00	151.6	1210.4	12_2_2010	351.4	Non-Agricultural
3602401	IN4W27A02S	Leroy Street Well	San Bernardino, City of	1239.7	334.00	905.7	12_14_2009	1239.7	222.7	1017.0	11_24_2010	111.3	Non-Agricultural
3601639	IS3W03R01S	146 EHR Well	East Valley Water District	1327.3	351.0	976.3	11_3_2009	1327.3	257.3	1070.0	12_1_2010	93.7	Non-Agricultural
3602337	IN4W26A03S	24B	East Valley Water District	1244.6	382.1	862.5	11_13_2009	1244.6	289.0	955.6	11_3_2010	93.1	Non-Agricultural
3600220	IS3W01H01S	142 Mt. Harrison	East Valley Water District	1520.0	282.9	1237.1	11_3_2009	1520.0	220.5	1299.5	12_2_2010	62.4	Non-Agricultural
3601675	IN4W25A01S	27	East Valley Water District	1295.6	258.6	1037.0	11_3_2009	1295.6	206.0	1089.6	12_1_2010	52.6	Non-Agricultural
3601671	IN4W26A02S	24A	East Valley Water District	1243.0	348.1	894.9	11_13_2009	1243.0	305.0	938.0	11_3_2010	43.1	Non-Agricultural
3602370	IN4W25F04S	107	East Valley Water District	1217.3	318.2	899.1	11_9_2009	1217.3	280.1	937.2	10_8_2010	38.1	Non-Agricultural
3603472	IN04W14P01	40TH & VALENCIA	San Bernardino, City of	1355.1	297	1058.1	12_16_2009	1355.1	260	1095.1	11_23_2010	37.0	Non-Agricultural
228801	IS3W11H01S	SBVWCD #4	San Bernardino Valley Water Cons. Dist.	1411.2	195.22	1216.0	11_17_2009	1411.2	171	1240.2	11_10_10	24.2	
3600680	IS3W02J02S	120 Cram Well	East Valley Water District	1410.0	176	1234.0	11_2_2009	1410.0	153.5	1256.5	12_3_2010	22.5	Non-Agricultural
3601673	IN4W25C02S	25A	East Valley Water District	1246.4	314	932.4	11_2_2009	1246.4	294.3	952.1	12_1_2010	19.7	Non-Agricultural
228601	IS3W12J01S	SBVWCD #3	San Bernardino Valley Water Cons. Dist.	1541.7	153.89	1387.8	11_17_2009	1541.7	135.2	1406.5	12_10_10	18.7	
3600728	IN4W26E02S	Waterman Well	San Bernardino, City of	1244.77	333.8	911.0	12_16_2009	1244.77	317.5	927.3	12_15_2010	16.3	Non-Agricultural
3602081	IN4W27B01S	31st & Mtn. View	San Bernardino, City of	1233.0	339.30	893.7	12_14_2009	1233.0	324.2	908.8	12_15_2010	15.1	Non-Agricultural
3600720	IN4W27M02S	27th Street Well	San Bernardino, City of	1184.1	301.50	882.6	12_15_2009	1184.1	287.5	896.6	11_24_2010	14.0	Non-Agricultural
3600719	IN4W27G01S	30th & Mtn. View	San Bernardino, City of	1227.4	332.00	895.4	12_16_2009	1227.4	318.9	908.5	12_15_2010	13.1	Non-Agricultural
3603583	IS3W02N02S	143 Abbey Way	East Valley Water District	1339.0	188.9	1150.1	11_17_2009	1339.0	176.0	1163.0	12_7_2010	12.9	Non-Agricultural
3600727	IN4W26E02S	Lynwood Well	San Bernardino, City of	1236.23	318.9	917.3	12_16_2009	1236.23	306.9	929.3	11_23_2010	12.0	Non-Agricultural
3600721	01N/04W-27M001S	25TH & NORTH E ST WELL	San Bernardino, City of	1192.1	299.5	892.6	12_16_2009	1192.1	290	1192.1	11_24_2010	9.5	Non-Agricultural
3601115	IN4W26P03S	Perris Hill #5	San Bernardino, City of	1173.5	279.4	894.1	12_16_2010	1173.5	272.6	900.9	12_15_2010	6.8	Non-Agricultural
3602274	IN3W30J05S	39	East Valley Water District	1350.3	373.7	976.6	11_13_2009	1350.3	368.2	982.1	11_3_2010	5.5	Non-Agricultural
3600019	IS3W23A05S	Rees Well	Redlands, City of	1490.0	271.0	1219.0	10_2009	1490.0	266	1224.0	12_2010	5.0	Non-Agricultural
3603774	01S/03W-03R004S	146A (Church Street)	East Valley Water District	1320.00	259.4	1,060.60	37957.0	1320.00	256.1	1063.9	12_1_2010	3.3	Non-Agricultural
3604001	IS3W14E01S	Church Street	Redlands, City of	1340.0	174.0	1166.0	11_2009	1340.0	171	1169.0	11_2010	3.0	Non-Agricultural
3600749	IS3W13P01S	Mentone Acres #2	Redlands, City of	1520.0	230.0	1290.0	11_2009	1520.0	228	1292.0	12_2010	2.0	Non-Agricultural
3602338	IS3W04N03S	40-A	East Valley Water District	1198.6	223	975.6	11_1_2009	1198.6	222.7	975.9	10_4_2010	0.3	Non-Agricultural
3600026	IS3W04J01S	102	East Valley Water District	1242.5	230.2	1012.3	11_3_2009	1242.5	230.0	1012.5	11_2_2010	0.2	Non-Agricultural
3601670	01N/04W-26A001S	24	East Valley Water District	1243.54				1243.54		1243.5		0.0	Non-Agricultural
3601884	01N/03W-31C002S	30	East Valley Water District	1209.80				1209.80		1209.8		0.0	Non-Agricultural
3601978	IS3W04N01S	40	East Valley Water District	1195.1	213.6	981.5	10_1_2009	1195.1		1195.1		0.0	Non-Agricultural
3600466	01S/03W-04G002S	48	East Valley Water District	1285.59				1285.59		1285.6		0.0	Non-Agricultural
3600970	01N/03W-19G	57	East Valley Water District	1500.00				1500.00		1500.0		0.0	Non-Agricultural
402901	01N/03W-30N001S	103	East Valley Water District</										

# Water Level Elevations for the Bunker Hill Basin

(Fall 2009 and Fall 2010)

Recordation Number	State Well Number	Well Name	Owner Or Measuring Agency	2009				2010				Difference Fall 2009 to Fall 2010	AGRI or Non AGRI Status
				Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured	Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured		
3601130	IS3W32D	Nick's Well	Loma Linda, City of	1216.0		1216.0		1216.0		1216.0		0.0	
3600053	IS3W29Q01S	Bryn Mawr #1	Redlands, City of	1215.0	221	994.0	10_1_2009	1215.0		1215.0		0.0	
3602109	IS3W31B	Bryn Mawr #4	Redlands, City of	1190.0	124.0	1066.0	10_1_2009	1190.0		1190.0		0.0	
3601234	IS4W27A19S	Stewart 19	Riverside, City of	1020.0	146	874.0	11_26_2009	1020.0		1020.0		0.0	
3601431	IS4W27H01S	Stewart 20	Riverside, City of	1020.0	168.11	851.9	8_11_2009	1020.0		1020.0		0.0	Non-Agricultural
3601233	IS4W27A13S	Stewart 21	Riverside, City of	1017.3	135.0	882.3	11_2007	1017.3		1017.3		0.0	
459401	01S03W12N	SAR #2	San Bernardino Valley Water Cons. Dist.	1442.0		1442.0		1442.0	206.72	1235.3	12_10_10	0.0	
3602264	1N4W27N01S	23rd Street Well	San Bernardino, City of	1192.1	301	891.1	10_21_2009	1174.8		1174.8		0.0	Non-Agricultural
	01S/03W-03R001S	5th & Church	U.S. Geological Survey/SBVMWD	1302.00				1302.00		1302.0		0.0	
9900017	IS3W01H01S	East of East Highlands - PL 142	U.S. Geological Survey/SBVMWD	1541.3	237.7	1303.6	12_3_2007	1541.3				0.0	
3600525	IS3W17H01S	Langford Ranches, W. of Alabama	U.S. Geological Survey/SBVMWD	1222.7	70.2	1152.5	11_1_2007	1222.7				0.0	Agricultural
	01N/04W-25C002S	Marshall & Mountain	U.S. Geological Survey/SBVMWD	1246.00				1246.00		1246.0		0.0	
	01N/04W-27B001S	Mt. View Ave.	U.S. Geological Survey/SBVMWD	1233.00				1233.00		1233.0		0.0	
3600374	IN3W33M01S	PL 138 Palm/Baseline	U.S. Geological Survey/SBVMWD	1285.0		1285.0		1285.0				0.0	Non-Agricultural
3602119	IS3W33C01S	Redlands	U.S. Geological Survey/SBVMWD	1309.8	155.5	1154.3	8_28_2007	1309.8				0.0	
3600075	IS3W28C01S	Redlands/Tennessee	U.S. Geological Survey/SBVMWD	1270.0	151.24	1118.8	10_31_2007	1270.0				0.0	
3601585	IS3W23A03S	San Bernardino Ave./Nelson	U.S. Geological Survey/SBVMWD	1480.4	263	1217.4	11_1_2007	1480.4				0.0	Non-Agricultural
3603116	IS3W13R01S	San Bernardino Street	U.S. Geological Survey/SBVMWD	1175.0	221	954.0	10_2009	1175.0				0.0	Non-Agricultural
	01S/03W-17H001S	W. of Alabama	U.S. Geological Survey/SBVMWD	1222.65				1222.65		1222.7		0.0	
3602113	IN3W30N01S	41	East Valley Water District	1232.3	305.6	926.7	11_3_2009	1232.3	306.0	926.3	11_4_2010	-0.4	Non-Agricultural
3602560	1S3W04G03S	136, Dunkirk #2	East Valley Water District	1240.0	260.8	979.2	11_3_2009	1240.0	261.7	978.3	11_4_2010	-0.9	Non-Agricultural
3600855	IN3W28P01S	54	East Valley Water District	1520.0	484.8	1035.2	40122.0	1520.0	486.5	1033.5	12_2_2010	-1.7	
3602211	IS3W26C01S	Well #37	Redlands, City of	1435.0	209.0	1226.0	12_2009	1435.0	211	1224.0	10_2010	-2.0	Non-Agricultural
3602032	IS3W22A02S	Well #35	Redlands, City of	1395.0	229.0	1166.0	10_2009	1395.0	232	1163.0	12_2010	-3.0	Non-Agricultural
3604002	IS3W29Q01S	Well #38	Redlands, City of	1215.0	119.0	1096.0	12_2009	1215.0	122	1093.0	12_2010	-3.0	Non-Agricultural
3600716	IN4W16E03S	Newmark #3	San Bernardino, City of	1407.9	187.3	1220.6	10_19_2009	1407.9	190.8	1217.1	12_13_2010	-3.5	Non-Agricultural
3601184	IN3W33F01S	94 Corwin	East Valley Water District	1413.2	390	1023.2	11_4_2009	1413.2	393.6	1019.6	11_2_2010	-3.6	Non-Agricultural
3601297	IS3W35G11S	Well #17	Redlands, City of	1550.0	21.0	1529.0	10_2009	1550.0	25	1525.0	12_2010	-4.0	Non-Agricultural
3602399	IN4W16E04S	Newmark #4	San Bernardino, City of	1413.6	177.40	1236.2	9_15_2009	1413.6	182.2	1231.4	12_13_2010	-4.8	Non-Agricultural
3600714	IN4W16E01S	Newmark #1	San Bernardino, City of	1413.0	180.5	1232.5	10_20_2009	1413.0	185.4	1227.6	12_13_2010	-4.9	Non-Agricultural
3602065	IS3W32J02S	Lee Well	Redlands, City of	1357.0	214.0	1143.0	12_2009	1357.0	219	1138.0	12_2010	-5.0	Non-Agricultural
3602031	IS3W21H06S	Well #30A	Redlands, City of	1314.8	195.0	1119.8	12_2009	1314.8	200	1114.8	11_2010	-5.0	Non-Agricultural
3601298	IS3W21H01S	Well #32	Redlands, City of	1318.1	200.0	1118.1	12_2009	1318.1	205	1113.1	12_2010	-5.0	Non-Agricultural
3603693	01N/04W-16M003S	EPA EXTRAC WELL 006	San Bernardino, City of	1396.6	168.9	1227.7	10_19_2009	1396.6	174.9	1221.7	11_24_2010	-6.0	Non-Agricultural
3600715	IN4W16E02S	Newmark #2	San Bernardino, City of	1405.3	174.8	1230.5	9_15_2009	1405.3	181	1224.3	12_13_2010	-6.2	Non-Agricultural
3602895	IS3W13H02S	Airport #1	Redlands, City of	1530.0	220.0	1310.0	11_2009	1530.0	228	1302.0	11_2010	-8.0	Non-Agricultural
3601987	01S/03W-04G002S	136-1, Dunkirk #1	East Valley Water District	1245.85	249.5	996.35	37957.0	1245.85	262.2	983.7	11_4_2010	-12.7	Non-Agricultural
3602036	IS3W21H07S	Well #31A	Redlands, City of	1319.0	198.0	1121.0	11_2009	1319.0	211	1108.0	12_2010	-13.0	Non-Agricultural
3602346	IS3W28J02S	New York Street	Redlands, City of	1310.0	162.0	1148.0	12_2009	1310.0	176	1134.0	11_2010	-14.0	Agricultural
3601586	IS3W15F01S	Orange Street	Redlands, City of	1290.0	135.0	1155.0	10_2009	1290.0	154	1136.0	10_2010	-19.0	Non-Agricultural
3603694	01N/04W-16M004S	EPA EXTRAC WELL 007	San Bernardino, City of	1404.5	171.5	1233.0	10_19_2009	1404.5	194.5	1210.0	11_24_2010	-23.0	Non-Agricultural
3601301	IS3W28H01S	Well #41	Redlands, City of	1312.0	172.0	1140.0	1_1_2009	1312.0	276	1036.0	12_2010	-104.0	Non-Agricultural
3601585	IN4W35L01S	San Berdo	Redlands, City of	1129.9	213.0	916.9	11_2009	1129.9	374	755.9	12_2010	-161.0	Non-Agricultural
3600581	01N/05W-07H001S	#26	Fontana Water Company	2066.00	112.0	1,954.00	37,931.00	2066.00		2066.0		0.0	
3600582	01N/05W-06G001S	#27	Fontana Water Company	2244.00	81.0	2,163.00	37,940.00	2244.00		2244.0		0.0	
3600586	01N/05W-06K002S	#33	Fontana Water Company	2155.00	89.0	2,066.00	37,931.00	2155.00		2155.0		0.0	
3600996	IN5W36H006S	8A	West Valley Water District	1262.4	452.0	810.4	12_1_2009	1262.4	427	835.4	12_30_2010	25.0	Non-Agricultural
3603470	IN4W31E03S	LC#10	Riverside Highland Water Company	12									

**Water Level Elevations for the Bunker Hill Basin**  
(Fall 2009 and Fall 2010)

Recordation Number	State Well Number	Well Name	Owner Or Measuring Agency	2009				2010				Difference Fall 2009 to Fall 2010	AGRI or Non AGRI Status
				Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured	Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured		
3602727	01N/05W-15Q002S	# 8	Fontana Water Company	1590.79	302.0	1,288.79	37,930.00	1590.79		1590.8		0.0	Non-Agricultural
3600569	01N/05W-22A001S	#13	Fontana Water Company	1549.80				1549.80		1549.8		0.0	
3600580	01N/05W-22F001S	#25	Fontana Water Company	1597.50	253.0	1,344.50	37,926.00	1597.50		1597.5		0.0	
3600585	01N/05W-16K001S	#32	Fontana Water Company	1722.90	293.0	1,429.90	37,933.00	1722.90		1722.9		0.0	
	01N/04W-31E002S	LC #2	Riverside Highland Water Company									0.0	
3601535	1N4W31D02S	LC#1	Riverside Highland Water Company	1269.2	424	845.2	4_1_2009	1269.2				0.0	
3602840	1N4W31F01S	LC#8	Riverside Highland Water Company	1258.0				1258.0				0.0	
3600713	1N5W36R01S	Lytle Creek #3	San Bernardino, City of	1247.8	179.5	1068.3	3_19_2009	1247.8		1247.8		0.0	Non-Agricultural
3601002	1N4W31P03S	Baseline/Lassen WSBCWD #9	U.S. Geological Survey/SBVMWD	1210.0	327.5	882.5	10_29_2007	1210.0				0.0	
3600303	01N/05W-26A006S	#04A	West Valley Water District	1400.00	161		11_01_2007	1400.00	161	1239.0		0.0	
3601725	01N/05W-25E001S	#05A, Lower 6	West Valley Water District	1383.40	165		11_01_2008	1383.40	165	1218.4		0.0	
3600996	01N/05W-36J003S	#08 Lord 1	West Valley Water District	1262.40				1262.40		1262.4		0.0	Non-Agricultural
3602897	1N5W23P02S	#34	West Valley Water District	1450.0		1450.0		1450.0		1450.0		0.0	Non-Agricultural
3603054	1N5W25E03S	#35	West Valley Water District	1365.0		1365.0		1365.0		1365.0		0.0	Non-Agricultural
3603055	1N5W36H05S	#36 Lord	West Valley Water District	1270.0	390	880.0	11_1_2007	1270.0	390	880.0		0.0	Non-Agricultural
3600307	1N5W23P04S	1/Upper 4	West Valley Water District	1470.0		1470.0		1470.0		1470.0		0.0	Non-Agricultural
3600304	1N5W26A03S	4/Lower 5	West Valley Water District	1398.0		1398.0		1398.0				0.0	Non-Agricultural
3600997	1N5W36H04S	7/Lord 7	West Valley Water District	1273.8		1273.8		1273.8	427	846.8	12_30_2010	0.0	Non-Agricultural
3600305	1N5W25E01S	5A/Lower 5	West Valley Water District	1383.4	261	1122.4	11_1_2009	1383.4	271.0	1112.4	11_30_2010	-10.0	Non-Agricultural
3601263	1N5W23Q01S	City 1	Rialto, City of	1430.0	263	1149.0	11_2009	1430	284	1146.0	11_2010	-21.0	
3602080	1N5W23Q02S	City 2	Rialto, City of	1430.0	281.00	1149.0	11_2009	1430.0	310.0	1120.0	10_2010	-29.0	Non-Agricultural
3601944	1N5W23Q01S	2/Lower 7	West Valley Water District	1430.0	250.00	1180.0	12_1_2009	1430.0	292.0	1138.0	10_30_2010	-42.0	Non-Agricultural
3601845	1N4W30M01S	Mallory Well	San Bernardino, City of	1319.8	320.1	999.7	10_19_2009	1319.8	370	949.8	10_18_2010	-49.9	Non-Agricultural
3600726	1N4W34G03S	16th & Sierra Way	San Bernardino, City of	1135.13	252.2	882.9	12_14_2009	1135.13	161	1215.2010	12_15_2010	91.2	Non-Agricultural
3601468	1S4W02P01S	Garner 5	Riverside, City of	1046.0	193.2	852.8	10_31_2007	1046.0	162.1	883.9	10_26_2010	31.1	Non-Agricultural
3601229	1S4W11D03S	Cooley I	Riverside, City of	1033.2	176.7	856.5	11_29_2009	1033.2	160.0	873.2	09_21_2010	16.7	Non-Agricultural
3601663	1S4W02Q04S	12	East Valley Water District	1058.9	192	866.9	10_1_2009	1058.9	176.7	882.2	12_2_2010	15.3	Non-Agricultural
3602564	1S4W12B06S	28A	East Valley Water District	1090.1	209.9	880.2	12_5_2009	1090.1	196.3	893.8	10_4_2010	13.6	Non-Agricultural
3602422	1S4W02K08S	Antil Well #6	San Bernardino, City of	1053.8	185	868.8	12_16_2009	1053.8	172	881.8	11_23_2010	13.0	Non-Agricultural
3601228	1S4W11D02S	Cooley H	Riverside, City of	1035.3	166	869.3	11_29_2009	1035.3	153.6	881.7	10_26_2010	12.4	Non-Agricultural
3601463	01S/04W-02A003S	Stiles	Riverside, City of	1072.00	190	882.00	11_2007	1072.00	180.0	892.0	09_17_2010	10.0	Non-Agricultural
3601117	1N4W35C03S	Perris Hill #4	San Bernardino, City of	1168.3	278.9	889.35	12_16_2009	1168.25	271.1	897.15	12_15_2010	7.8	Non-Agricultural
3603789	01N/04W-32R	EPA EXTRAC WELL 111	San Bernardino, City of	1165.7	318	847.7	12_15_2009	1165.7	311.5	854.2	12_13_2010	6.5	Non-Agricultural
3603690	01S/04W-03C004S	EPA EXTRAC WELL 003	San Bernardino, City of	1090.2	255.5	834.7	12_14_2009	1090.2	251	839.2	11_22_2010	4.5	Non-Agricultural
3603691	01S/04W-03B003S	EPA EXTRAC WELL 004	San Bernardino, City of	1086.3	224.3	862.0	12_14_2009	1086.3	220	866.3	12_13_2010	4.3	Non-Agricultural
3603788	01N/04W-33N-S	EPA EXTRAC WELL 110	San Bernardino, City of	1146.2	396.2	750.0	12_14_2009	1146.2	393.0	753.2	12_13_2010	3.2	Non-Agricultural
3602034	1S4W02Q08S	12A	East Valley Water District	1057.0	199	858.0	11_1_2009	1057.0	196.0	861.0	11_2_2010	3.0	Non-Agricultural
9900015	1S4W02Q11S	Garner 7	Riverside, City of	1050.7	171	879.7	11_30_2007	1050.7	168.2	882.5	10_26_2010	2.8	
3603207	1S4W04B04S	10th & "J" Street	San Bernardino, City of	1113.8	240.3	873.5	12_15_2009	1113.8	237.8	876.0	12_13_2010	2.5	Non-Agricultural
3602417	1S3W05D03S	Cull #2 / 132-2	East Valley Water District	1155.0	220.5	934.5	10_1_2009	1155.0	219.8	935.2	12_1_2010	0.7	Non-Agricultural
3601660	1S3W06H04S	9A	East Valley Water District	1151.5	216.6	934.9	11_4_2009	1151.5	216.2	935.3	12_1_2010	0.4	Non-Agricultural
	01S/04W-01B004S	7	East Valley Water District	1096.70				1096.70		1096.7		0.0	
3601664	01S/04W-02N001S	13	East Valley Water District	1039.01				1039.01		1039.0		0.0	Non-Agricultural
3601665	1S4W01K04S	14	East Valley Water District	1092.8				1092.8		1092.8		0.0	Non-Agricultural
3601668	01S/04W-01E002S	22	East Valley Water District	1070.00				1070.00		1070.0		0.0	Non-Agricultural
3602563	1S4W02Q09S	11A	East Valley Water District	1056.9		1056.9		1056.9				0.0	Non-Agricultural
3601781	01S/03W-06K001S	35, Baseline Mutual	East Valley Water District	1132.00				1132.00		1132.0		0.0	Non-Agricultural
3601227	1S4W02N02S	5th & Cooley	East Valley Water District	1040.1		1040.1		1040.1				0.0	
3600269	1N3W31L01S	68 Morley	East Valley Water District	1147.1									

**Water Level Elevations for the Bunker Hill Basin**  
 (Fall 2009 and Fall 2010)

Recordation Number	State Well Number	Well Name	Owner Or Measuring Agency	2009				2010				Difference Fall 2009 to Fall 2010	AGRI or Non AGRI Status
				Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured	Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured		
3601232	IS4W11D04S	Cooley A	Riverside, City of	1020.8	174	846.8	11_30_2007	1020.8		1020.8		0.0	
3601432	IS4W11D01S	Cooley B	Riverside, City of	1034.4	176	858.4	11_30_2007	1034.4		1034.4		0.0	
3601224	IS4W02P03S	Cooley C	Riverside, City of	1040.5	177	863.5	11_30_2007	1040.5		1040.5		0.0	
3601225	01S/04W-02P002S	Cooley D	Riverside, City of	1037.60	142	896.10	2_2009	1037.60		1037.6		0.0	
3601220	IS4W02P04S	Cooley E	Riverside, City of	1040.0		1040.0		1040.0		1040.0		0.0	
3601226	IS4W02L02S	Cooley F	Riverside, City of	1050.0	180	870.0	11_30_2007	1050.0		1050.0		0.0	
3601227	01S/04W-02N002S	Cooley G	Riverside, City of	1040.10				1040.10		1040.1		0.0	
3601464	01S/04W-02P006S	Garnet 1	Riverside, City of	1049.40				1049.40		1049.4		0.0	Non-Agricultural
3601465	01S/04W-02Q003S	Garnet 2	Riverside, City of	1053.90				1053.90		1053.9		0.0	Non-Agricultural
3601466	IS4W02Q07S	Garnet 3	Riverside, City of	1053.0	180	873.0	11_30_2007	1053.0		1053.0		0.0	
3601467	IS4W02Q06S	Garnet 4	Riverside, City of	1057.1		1057.1		1057.1		1057.1		0.0	Non-Agricultural
3601462	IS4W01E01S	Poole	Riverside, City of	1061.0	158	903.00	11_26_2009	1061.0		1061.0		0.0	
3601489	01S/04W-02L001S	Scheuer	Riverside, City of	1052.00				1052.00	161.7	890.3	10_26_2010	0.0	Non-Agricultural
106801	01S/04W-03D001S	11th & E STREET WELL	San Bernardino, City of	1096.8	168.8	928.0	10_21_2009	1096.8		1096.8		0.0	
3600725	1N4W34G01S	17th & Sierra Way #2	San Bernardino, City of	1137.2	241.5	895.7	9_19_2009	1137.2		1137.2		0.0	Non-Agricultural
3600734	IS4W02K03	Antil No. 4	San Bernardino, City of	1058.5		1058.5		1058.5		1058.5		0.0	Non-Agricultural
3600731	IS4W02K02	Antil No. 5	San Bernardino, City of	1053.8	198.5	855.3	10_21_2009	1059.0		1059.0		0.0	Non-Agricultural
3600730	01S/04W-02K001S	Antil Well #3	San Bernardino, City of	1054.24		#VALUE!		1054.24				0.0	Non-Agricultural
3601114	01N/04W-35C001S	Perris Hill #2	San Bernardino, City of	1151.61		#VALUE!		1151.61				0.0	Non-Agricultural
3601116	1N4W35C02S	Perris Hill #3	San Bernardino, City of	1167.4		1167.4		1167.4		1167.4		0.0	Non-Agricultural
3603247	1S3W06P18S	141, McDaniel	East Valley Water District	1120.0	209.5	910.5	11_11_2009	1120.0	209.7	910.3	12_1_2010	-0.2	Non-Agricultural
3601656	1N4W36Q01S	6	East Valley Water District	1098.9	167.9	931.0	11_3_2009	1098.9	169.6	929.3	10_6_2010	-1.7	Non-Agricultural
3603688	01S/04W-03D004S	EPA EXTRAC WELL 001	San Bernardino, City of	1093.9	218.5	875.4	12_14_2009	1093.9	221.5	872.4	11_22_2010	-3.0	Non-Agricultural
3603786	01N/04W-33R	EPA EXTRAC WELL 108	San Bernardino, City of	1119.3	268.3	851.0	12_14_2009	1119.3	271.5	847.8	12_13_2010	-3.2	Non-Agricultural
3603689	01S/04W-03C003S	EPA EXTRAC WELL 002	San Bernardino, City of	1091.7	230.3	861.4	12_14_2009	1091.7	234.2	857.5	11_22_2010	-3.9	Non-Agricultural
3603692	01S/04W-03A004S	EPA EXTRAC WELL 005	San Bernardino, City of	1083.3	203.8	879.5	12_14_2009	1083.3	208.1	875.2	11_22_2010	-4.3	Non-Agricultural
3602265	1S4W03J05S	7th Street Well	San Bernardino, City of	1057.4	178.00	879.4	12_14_2009	1057.4	182.5	874.9	11_23_2010	-4.5	Non-Agricultural
3603786	01N/04W-33R003S	EPA EXTRAC WELL 108-S	San Bernardino, City of	1119.3	241.3	878.0	12_15_2009	1119.3	247.4	871.9	12_13_2010	-6.1	Non-Agricultural
3603206	IS4W04D02S	Olive & Garner	San Bernardino, City of	1132.5	242.7	889.8	12_14_2009	1132.5	249.2	883.3	12_13_2010	-6.5	Non-Agricultural
3603787	01N/04W-33P	EPA EXTRAC WELL 109	San Bernardino, City of	1137.1	405	732.1	10_19_2009	1137.1	414	723.1	12_13_2010	-9.0	Non-Agricultural
3600729	1N4W35M03S	Gilbert Street Well	San Bernardino, City of	1123.54	243.0	880.5	12_14_2009	1123.54	253.3	870.2	11_22_2010	-10.3	Non-Agricultural
111701	01N/04W-35L001S	Meecham	San Bernardino, City of	1129.94	229.30	900.6	2_25_2009	1129.94	241.6	888.3	12_15_2010	-12.3	
3603254	IS4W02Q10S	Garner 6	Riverside, City of	1048.0	99.4	948.6	10_31_2007	1048.0	165.8	882.2	10_26_2010	-66.4	Non-Agricultural
3600794	1S4W13F02S	31-1	Riverside, City Of-Gage Canal	1054.6	152.5	902.1	11_8_2009	1054.6	16.00	894.6	11_21_2010	136.5	Non-Agricultural
3603557	1S4W13L07S	92-2	Riverside, City Of-Gage Canal	1053.4	255.0	798.4	11_8_2009	1053.4	191.00	862.4	10_20_2010	64.0	Non-Agricultural
3603720	1S4W24F11S	Richardson IV	Loma Linda, City of	1070.0	228.00	842.0	11_16_2009	1070.0	178.0	892.0	12_29_2010	50.0	Non-Agricultural
3603556	IS4W13L08S	92-3	Riverside, City Of-Gage Canal	1058.8	233.0	825.8	11_8_2009	1058.8	190.00	868.78	10_20_2010	43.0	Non-Agricultural
3603555	IS4W14N	Raub 8	Riverside, City of	1016.4	194	822.4	11_26_2009	1016.4	174.11	842.3	10_12_2010	19.9	Non-Agricultural
3603558	IS4W13N07S	92-1	Riverside, City Of-Gage Canal	1047.8	192.3	855.5	10_26_2009	1047.8	178.00	869.78	10_20_2010	14.3	Non-Agricultural
3602778	IS4W14N10S	Raub 6	Riverside, City of	1015.0	177	838.00	11_26_2009	1015.0	163.7	851.3	10_12_2010	13.3	Non-Agricultural
3600792	1S4W13N02S	29-3	Riverside, City Of-Gage Canal	1048.8	175.0	873.8	11_17_2009	1048.8	164.00	884.8	10_19_2006	11.0	Non-Agricultural
Find Lat long	1S4W13L07S	Tippecanoe Well	Riverside, City Of-Gage Canal	1046.7	176.4	870.3	1_27_2009	1046.7	165.50	881.2	11_23_2010	10.9	
3603776	1S4W24D08S	Mt. View Well V	Loma Linda, City of		185	-185.0	12_23_2009		181.0	-181.0	12_29_2010	4.0	Non-Agricultural
3602484	IS4W14N09S	Raub 5	Riverside, City of	1016.5	166	850.50	11_26_2009	1016.5	164.9	851.6	10_31_2010	1.1	Non-Agricultural
3603057	IS4W23C02S	Richardson I	Loma Linda, City of	1077.0	182.00	895.0	12_23_2009	1077.0	181.0	896.0	12_29_2010	1.0	Non-Agricultural
3601243	IS4W22H02S	Warren 4	Riverside, City of	1005.3	171	834.3	11_30_2007	1005.3	170.0	835.3	09_23_2010	1.0	Non-Agricultural
3600786	01S/04W-13L002S	21	Gage Canal Co.	1051.82				1051.82					

**Water Level Elevations for the Bunker Hill Basin**  
 (Fall 2009 and Fall 2010)

Recordation Number	State Well Number	Well Name	Owner Or Measuring Agency	2009				2010				Difference Fall 2009 to Fall 2010	AGRI or Non AGRI Status
				Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured	Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured		
3601737	IS4W16J09S	Coburn	Meeks & Daley Water Co	979.0		979.0		979.0		979.0		0.0	Non-Agricultural
3603214	IS4W16R04S	Station 69	Meeks & Daley Water Co	978.0		978.0		978.0		978.0		0.0	Non-Agricultural
3603215	IS4W15M11S	Station 91	Meeks & Daley Water Co	980.0	114.3	865.7	10_2009	980.0	114.3	865.7	12_2010	0.0	Agricultural
	01S/04W-22M07S	FW #1	Riverside Highland Water Company									0.0	
3601528	01S/04W-22N	FW #10	Riverside Highland Water Company									0.0	
3601533	01S/04W-22L05S	FW #18	Riverside Highland Water Company	984.38				984.38				0.0	Agricultural
3601523	01S/04W-22L	FW #2	Riverside Highland Water Company	983.00								0.0	
	01S/04W-22P05S	FW #24	Riverside Highland Water Company	989.61								0.0	
3601237	01S/04W-22B002S	Byrne	Riverside, City of	998.20				998.20		998.2		0.0	
3602773	IS4W27A10S	Hunt 11	Riverside, City of	1015.7	103.8	911.9	10_31_2007	1015.7		1015.7		0.0	Non-Agricultural
3602771	IS4W27A11S	Hunt 6	Riverside, City of	1015.5		1,015.50		1015.5	169.0	846.5	10_12_2010	0.0	Non-Agricultural
3601241	01S/04W-27A007S	Hunt 8	Riverside, City of	1017.00				1017.00		1017.0		0.0	
3601242	IS4W27A08S	Hunt 9	Riverside, City of	1016.0		1,016.00		1016.0		1016.0		0.0	
3601219	IS4W23C02S	Raub 2	Riverside, City of	1077.0	172	905.00	12_17_2007	1077.0		1077.0		0.0	Non-Agricultural
3601239	IS4W14P06S	Raub 3	Riverside, City of	1027.1	138	889.10	11_30_2007	1027.1		1027.1		0.0	Non-Agricultural
3601478	IS4W22B03S	Thorn 10	Riverside, City of	999.1	58	941.1	9_31_2007	999.1		999.1		0.0	Agricultural
3601479	IS4W22B05S	Thorne 11	Riverside, City of	996.9		996.9		996.9		996.9		0.0	
3601471	IS4W22G14S	Thorne 3	Riverside, City of	994.9	80	914.9	12_1_2007	994.9		994.9		0.0	
3601473	IS4W22G16S	Thorne 5	Riverside, City of	994.3	82	912.3	9_30_2007	994.3		994.3		0.0	
3601474	IS4W22G18S	Thorne 6	Riverside, City of	995.0		995.0		995.0		995.0		0.0	Non-Agricultural
3601475	IS4W22G17S	Thorne 7	Riverside, City of	994.4	82	912.4	9_31_2007	994.4		994.4		0.0	
3601476	IS4W22G19S	Thorne 8	Riverside, City of	995.6	81	914.6	9_31_2007	995.6		995.6		0.0	
3601477	IS4W22B01S	Thorne 9	Riverside, City of	1002.9	58	944.9	9_31_2007	1002.9		1002.9		0.0	
3601240	IS4W22H04S	Warren 1	Riverside, City of	998.6	156	842.6	11_30_2007	998.6		998.6		0.0	Non-Agricultural
3601231	IS4W22H01S	Warren 2	Riverside, City of	1004.8	90	914.8	11_30_2007	1004.8		1004.8		0.0	
3601230	IS4W22H03S	Warren 3	Riverside, City of	998.0	98	900.0	11_30_2007	998.0		998.0		0.0	
3600790	IS4W23K02S	29-1	Riverside, City Of-Gage Canal	1044.4	152.0	892.4	11_14_2009	1044.4	152.00	892.4	11_21_2010	0.0	Agricultural
3600795	IS4W13G02S	46-1	Riverside, City Of-Gage Canal	1065.5	168.2	897.3	3_6_2009	1065.5		894.6		0.0	Non-Agricultural
3600798	IS4W23G01S	Cowlane	Riverside, City Of-Gage Canal	1046.7	128.8	917.9	11_27_2006	1046.7				0.0	Non-Agricultural
107801	01S/04W-22C005S	Century Well	San Bernardino, City of	989.01				989.01		989.0		0.0	
3603582	01S/04W-15P005S	Chandler Well	San Bernardino, City of	989.28				989.28				0.0	Non-Agricultural
3600737	01S/04W-10N	#62, Mill & "D"	San Bernardino, City of / shallow wells	1010.00				1010.00	93.8	1010.0	12_15_2010	0.0	Non-Agricultural
3600736	IS4W09J01S	City of SB, S. 'G' St	U.S. Geological Survey/SBVMWD	1030.0	164.12	865.9	10_29_2007	1030.0				0.0	Non-Agricultural
	01S/04W-22B003S	W. of Waterman	U.S. Geological Survey/SBVMWD	1002.00	94.26		10_30_2007	1002.00		1002.0		0.0	
3602855	IS4W25D07S	Anderson III	Western Municipal Water District	1070.0		1070.0		1070.0		1070.0		0.0	Agg&NonAgg
3603720		Richardson VI	Loma Linda, City of	185	-185.0	12_29_2009		187.0	-187.0	12_29_2010	-2.0	Non-Agricultural	
3600791	IS4W13N01S	29-2	Riverside, City Of-Gage Canal	1046.3	155.0	891.3	11_8_2009	1046.3	157.00	889.3	10_20_2010	-2.0	Non-Agricultural
3600796	IS4W23A05S	51-1	Riverside, City Of-Gage Canal	1044.6	169.0	875.6	11_14_2009	1044.6	171.00	873.6	10_20_2010	-2.0	Agricultural
3600797	IS4W13G03S	56-1	Riverside, City Of-Gage Canal	1065.5	201.8	863.7	10_22_2009	1065.5	204.00	861.5	11_20_2010	-2.2	
3600789	IS4W23K01S	27-2	Riverside, City Of-Gage Canal	1044.6	155.5	889.1	11_8_2009	1044.6	158.50	886.1	10_20_2010	-3.0	Agricultural
3600723	IS4W10F	#40, Handford #1, SCE	San Bernardino, City of	1030.4	110.2	920.2	10_27_2009	1030.4	113.6	916.8	10_20_2010	-3.4	Non-Agricultural
3600788	IS4W23H01S	27-1	Riverside, City Of-Gage Canal	1044.6	154.0	890.6	10_14_2009	1044.6	157.70	886.9	11_21_2010	-3.7	Agricultural
3602760	IS4W24B01S	Mt. View Well III	Loma Linda, City of	1095.0	200.00	895.0	12_29_2009	1095.0	204.0	891.0	12_29_2010	-4.0	Non-Agricultural
3601530	IS4W22L08S	FW #12	Riverside Highland Water Company	985.4	90	895.4	10_2_09	985.4	94	891.4	10_01_2010	-4.0	Non-Agricultural
3600737	IS4W10N06S	Mill & D	San Bernardino, City of	1001.0	89.2	911.8	9_16_2009	1001.0	93.5	907.5	11_23_2010	-4.3	Non-Agricultural
3600793	IS4W13M02S	30-1	Riverside, City Of-Gage Canal	1054.2	164.0	890.2	11_8_2009	1054.2	168.50	885.7	11_21_2010	-4.5	Non-Agricultural
256301	IS4W23Q	Lower Kelly	Riverside, City Of-Gage Canal	1040.8	165	875.8	11_8_2009	1040.8	170.00	870.8	11_21_2010	-5.0	
3601218	IS4W14P02S	Raub 1	Riverside, City of	1026.8	158	868.80	11_26_2009	1026.8	164.0	862.8	09_15_2010	-6.0	
3600787	IS4W23A02S	26-1	Riverside, City Of-Gage Canal	1045.3	152.0	893.3	11_8_2009	1045.3	158.00	887.3	10_24_2010	-6.0	Agricultural
3601887	IS4W15L03S	#59	Meeks & Daley Water Co	984.0	133.4	850.6	10_2009	984.0	139.7	844.3	11_2010	-6.3	Agricultural
3603514	IS4W22L17S	FW #5	Riverside Highland Water Company	989.00	96.0	893.0	11_02_2009	989.00	103	886			

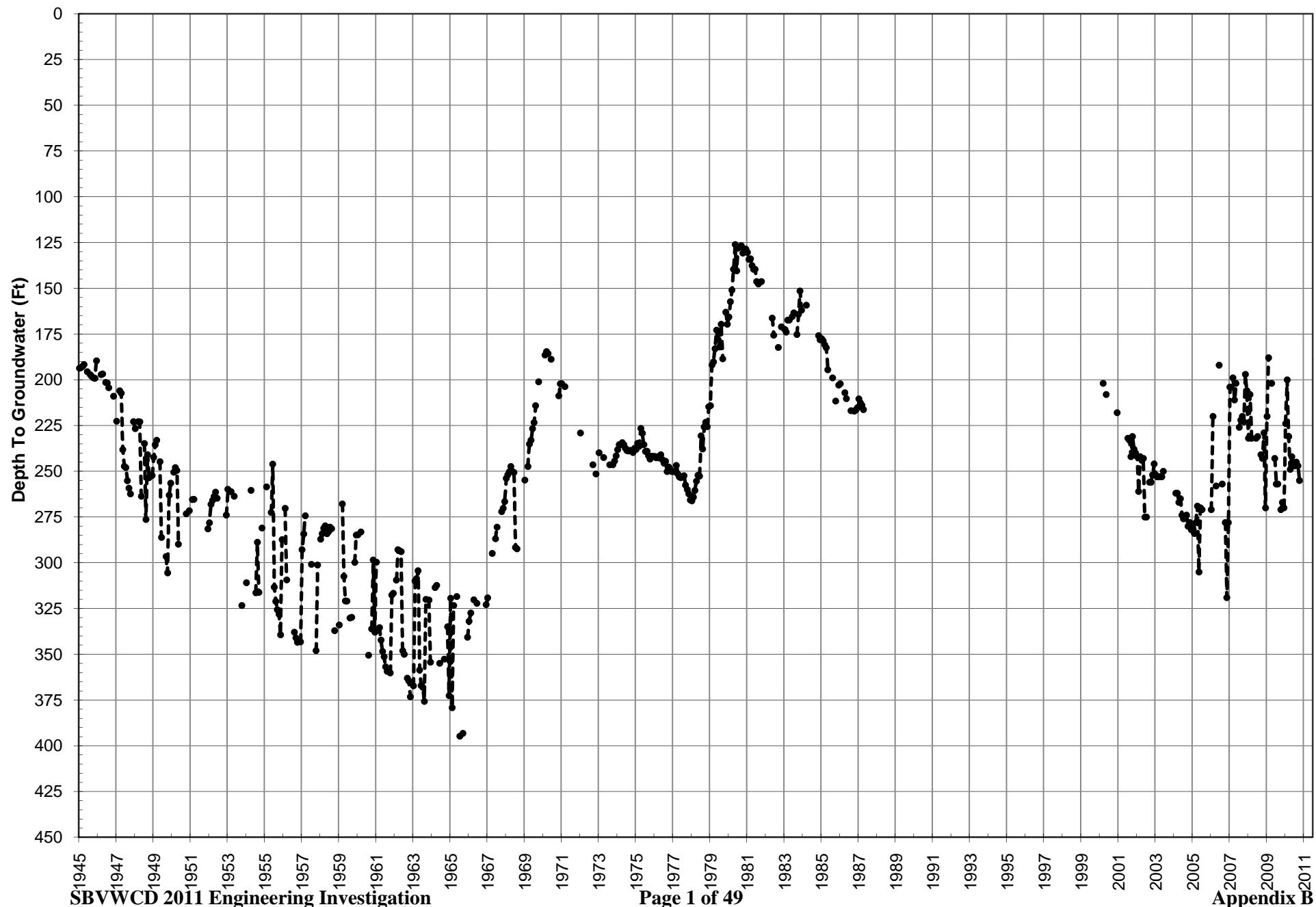
**Water Level Elevations for the Bunker Hill Basin**  
 (Fall 2009 and Fall 2010)

Recordation Number	State Well Number	Well Name	Owner Or Measuring Agency	2009				2010				Difference Fall 2009 to Fall 2010	AGRI or Non AGRI Status
				Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured	Measuring Point Elevation	Depth To Water (ft)	Groundwater Elevation (ft, AMSL)	Date Measured		
3600756	IS3W19L01S	Mission #1	Redlands, City of	1130.0	183.0	947.0	12_2009	1130.0	194	936.0	10_2010	-11.0	Non-Agricultural
3601299	IS4W24K01S	Well #34	Redlands, City of	1090.0	185.0	905.0	10_2009	1090.0	196	894.0	11_2010	-11.0	Non-Agricultural
Find Lat long	IS4W13G04S	46-1R	Riverside, City Of-Gage Canal	1065.0	166	899.0	10_17_2009	1065.0	181.00	909.0	10_20_2010	-15.0	
3601238	IS4W23C03S	Raub 4	Riverside, City of	1022.8	163	859.80	11_26_2009	1022.8	181.1	841.7	10_31_2010	-18.1	Non-Agricultural
3601316	01S/04W-23N	INTER CITY MUTUAL 08	San Bernardino, City of	1028	143.8	884.2	10_16_2009	1028	162.5	865.5	11_23_2010	-18.7	Non-Agricultural
3603523	IS4W24C04S	Richardson III	Loma Linda, City of	1079.0	183.00	896.0	12_29_2009	1079.0	202.0	877.0	12_22_2010	-19.0	Non-Agricultural
3602781	IS4W25D06S	Anderson II	Loma Linda University	1075.0	225	850.00	11_04_2009	1075.0	245.0	830.0	10_15_2010	-20.0	Agricultural
3600785	IS4W14R	17	Riverside, City Of-Gage Canal	1036.5	152	884.5	11_8_2009	1036.5	172.00	864.5	11_21_2010	-20.0	
3602772	IS4W27A09S	Hunt 10	Riverside, City of	1017.7	148	869.7	11_26_2009	1017.7	172.8	844.9	10_12_2010	-24.8	Non-Agricultural
3601470	01S/04W-22B007S	Thorn 12	Riverside, City of	1001.86	98.0	903.86	11_2007	1001.86	137.8	864.1	10_12_2010	-39.8	Non-Agricultural
3602331	IS4W23G03S	66-1	Riverside, City Of-Gage Canal	1044.9	70	974.9	7_9_2009	1044.9	172.00	864.5	10_20_2010	-102.0	Agricultural
Find Lat long	2S4W5C01S	DeBerry	Riverside, City Of-Gage Canal	976.4		976.4		976.4	168.00	808.4	11_21_2010	0.0	
Find Lat long	2S5W26M01S	Olivewood #3	Riverside, City Of-Gage Canal	811.0	54.5	756.5	10_26_2009	811.0	53.00	758.0	11_21_2010	1.5	
Find Lat long	2S5W26E02S	Olivewood #2	Riverside, City Of-Gage Canal	816.9	59	757.9	11_8_2009	816.9	59.20	757.7	11_21_2010	-0.2	
Find Lat long	2S5W26F01S	Olivewood #1	Riverside, City Of-Gage Canal	810.9	53.99	756.9	9_27_2009	810.9	56.30	754.6	11_21_2010	-2.3	



B.V. Judson  
Index Well Hydrograph

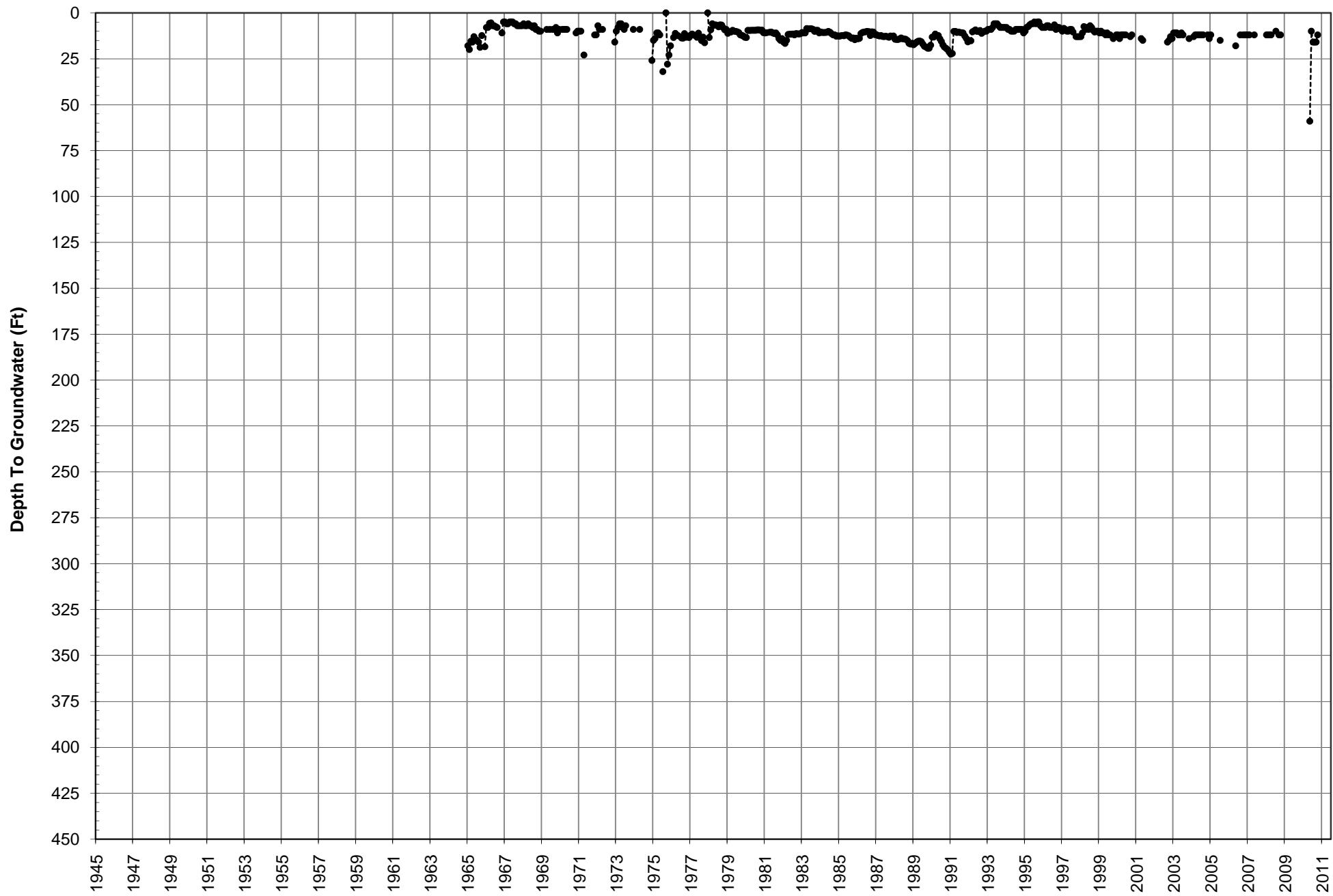
Bear Valley Mutual Water Co.





## Mill Creek #0A Index Well Hydrograph

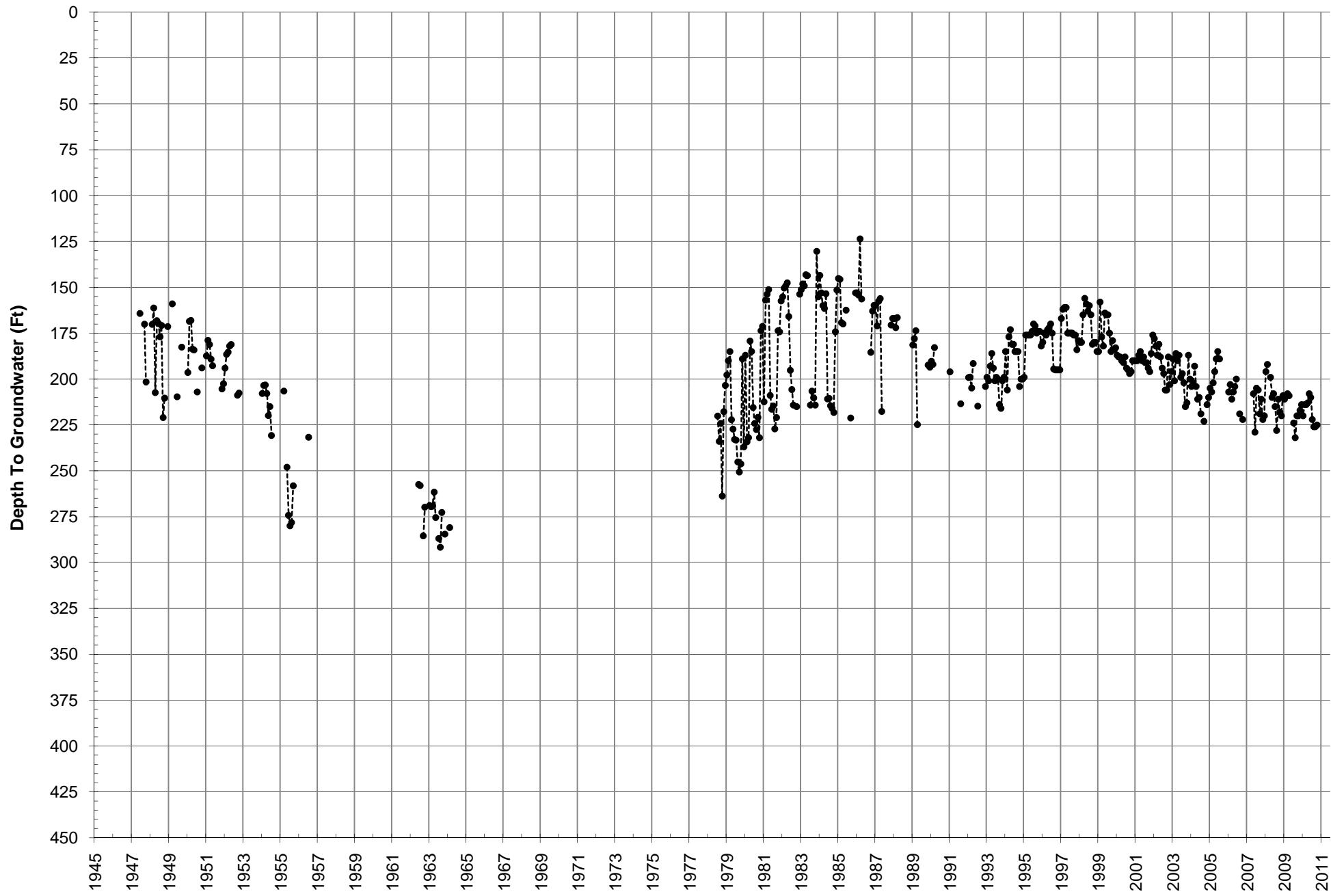
City of Redlands





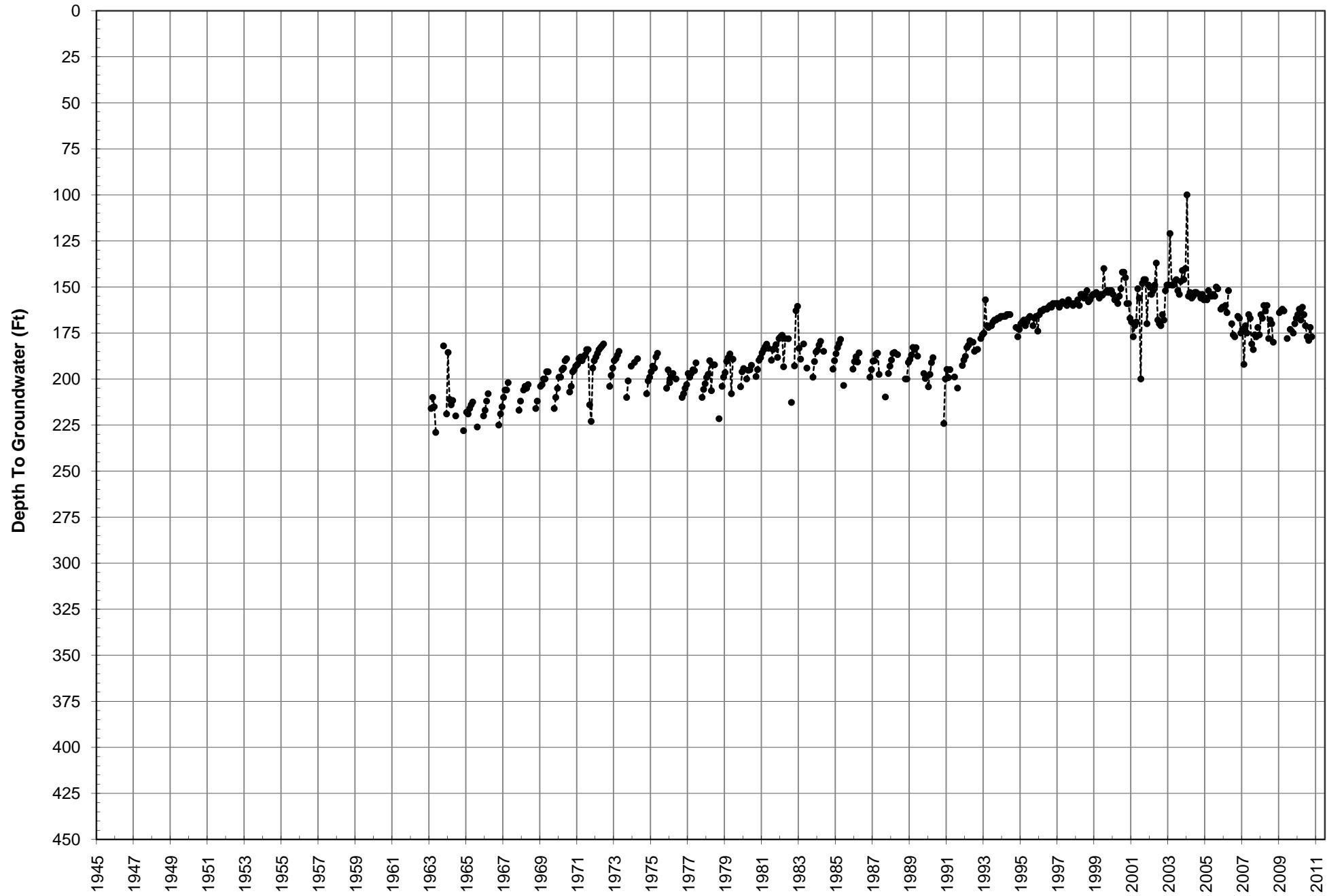
## Lee Well Index Well Hydrograph

City of Redlands



## Redlands Heights Index Well Hydrograph

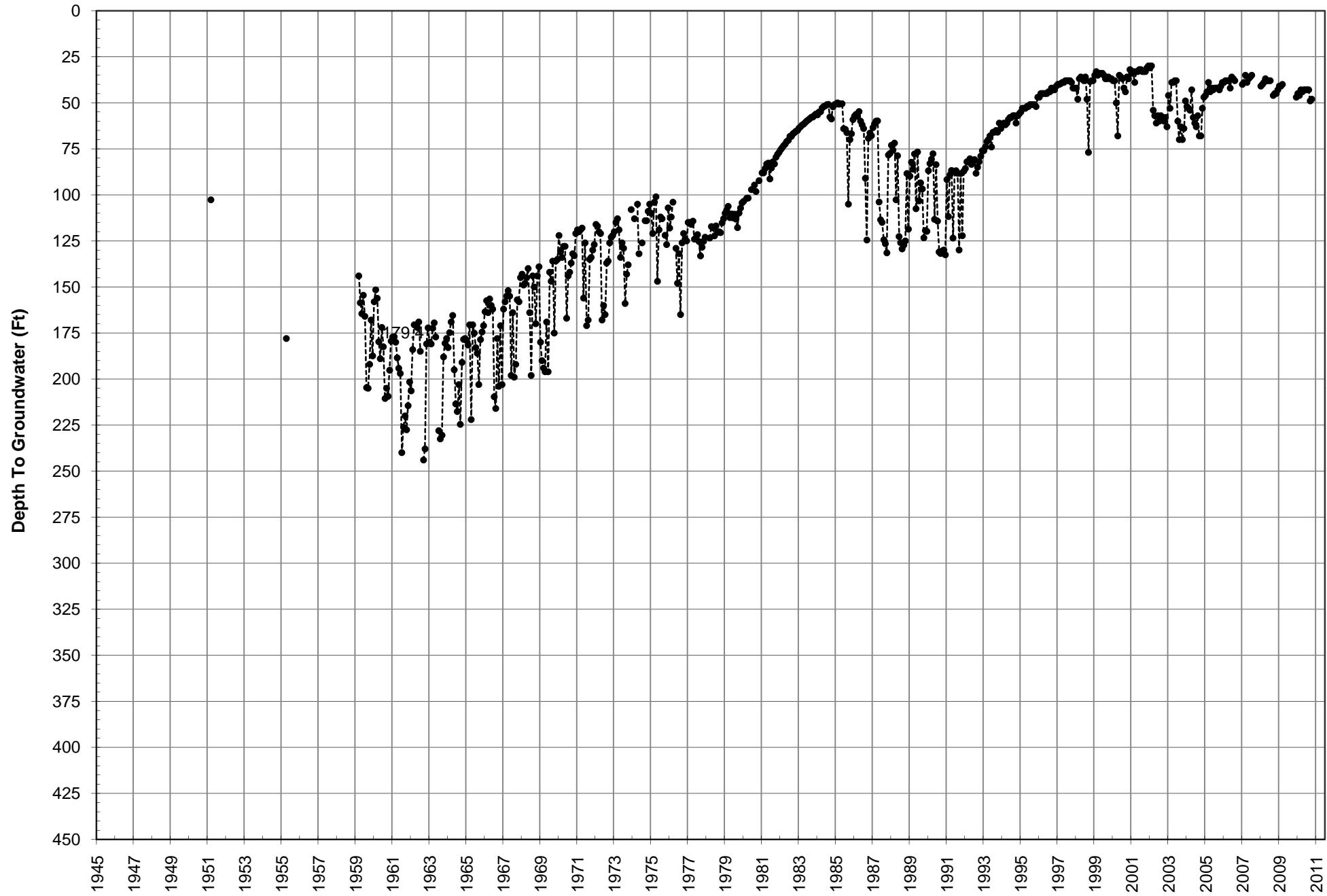
City of Redlands





## Well #16 Index Well Hydrograph

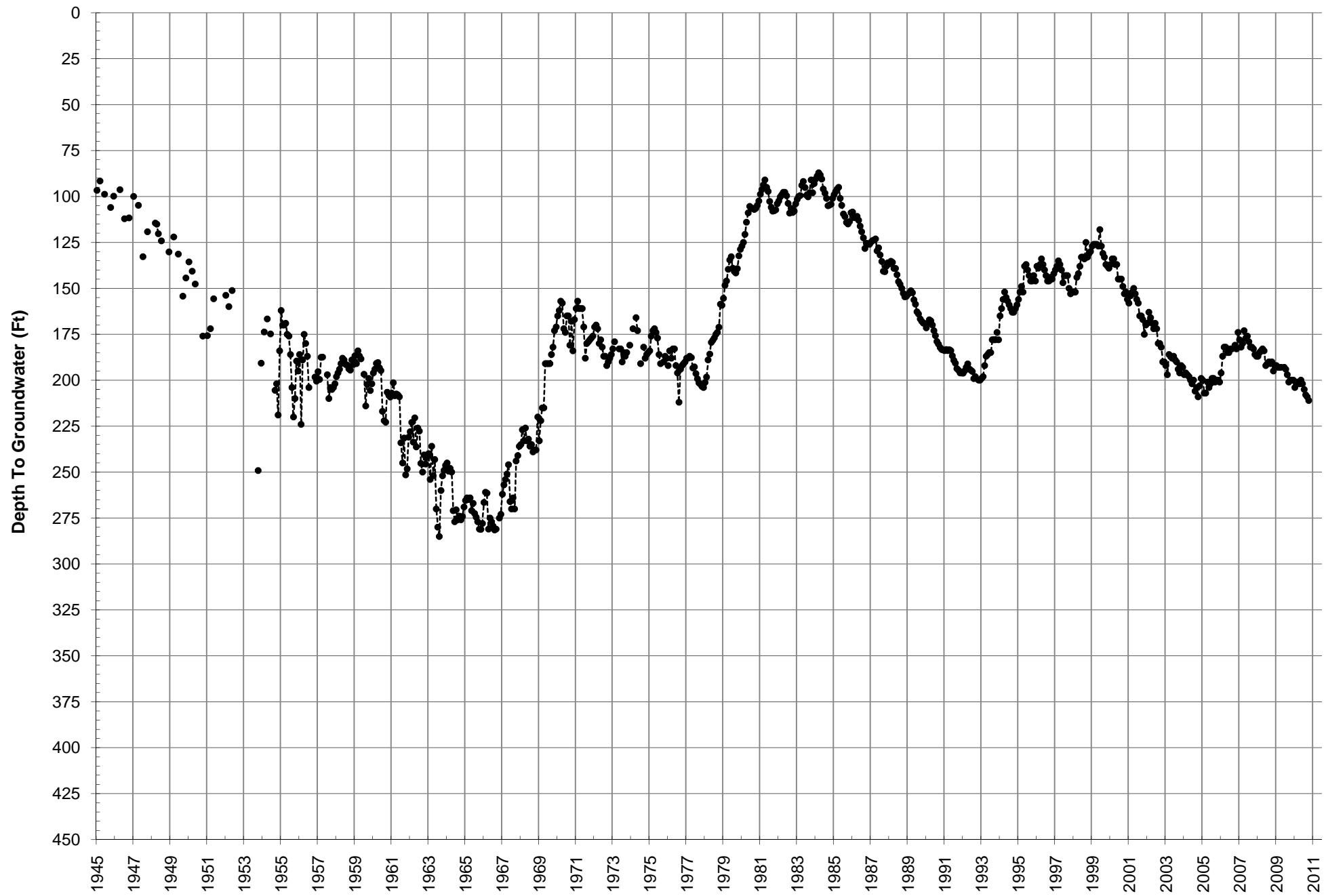
City of Redlands





## Well #32 Index Well Hydrograph

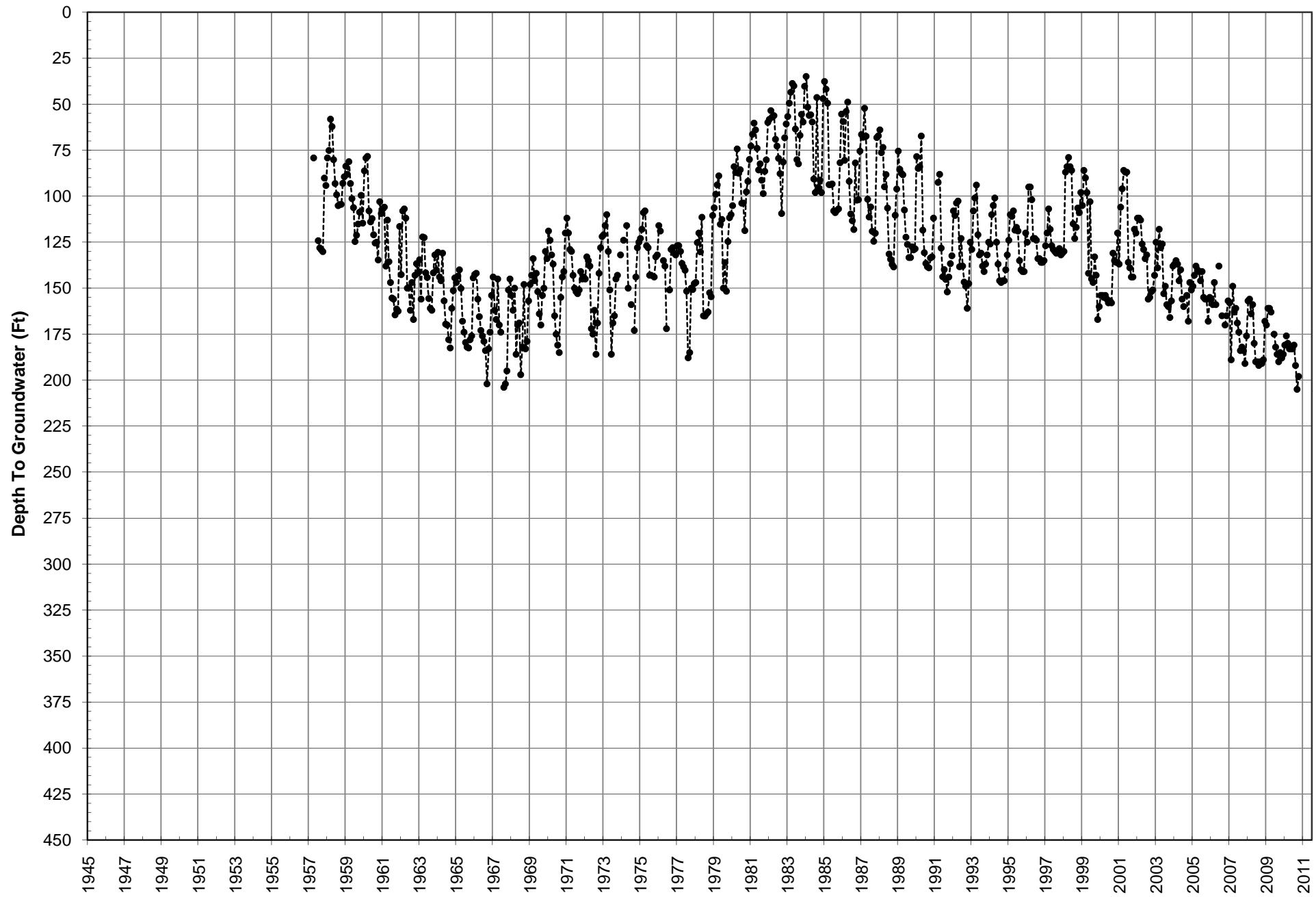
City of Redlands





## Well #34 Index Well Hydrograph

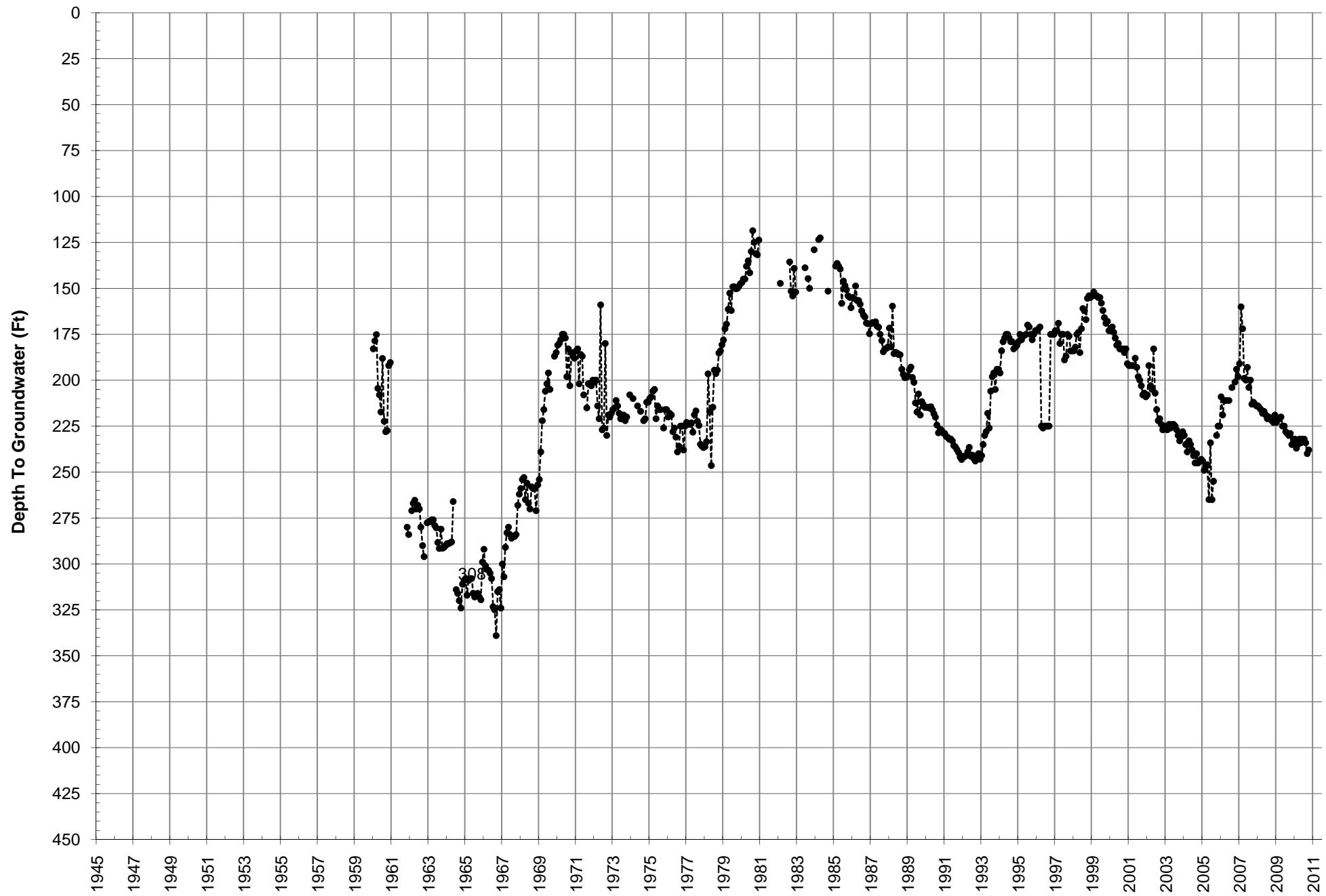
City of Redlands





## Well #35 Index Well Hydrograph

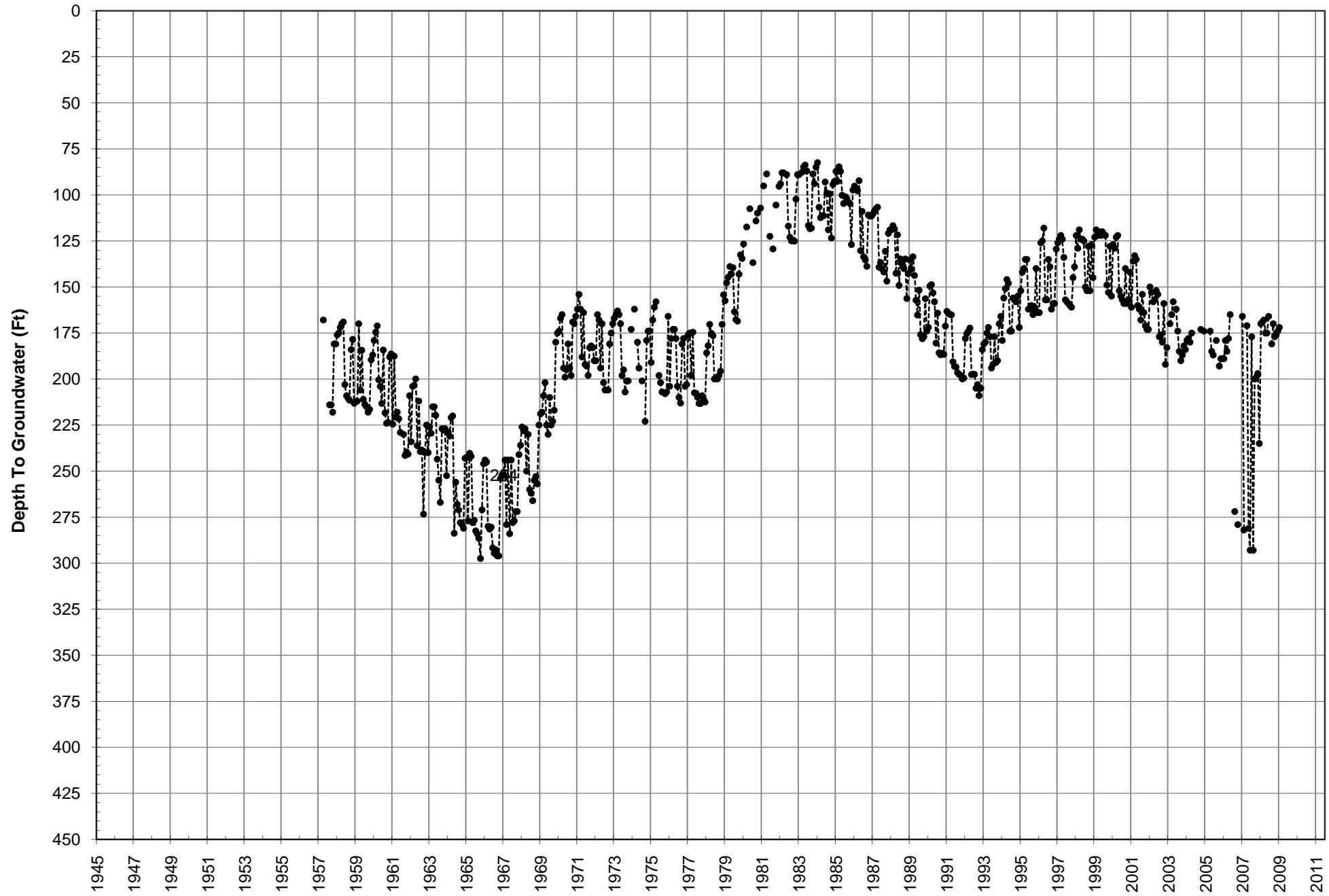
City of Redlands





## Well #41 Index Well Hydrograph

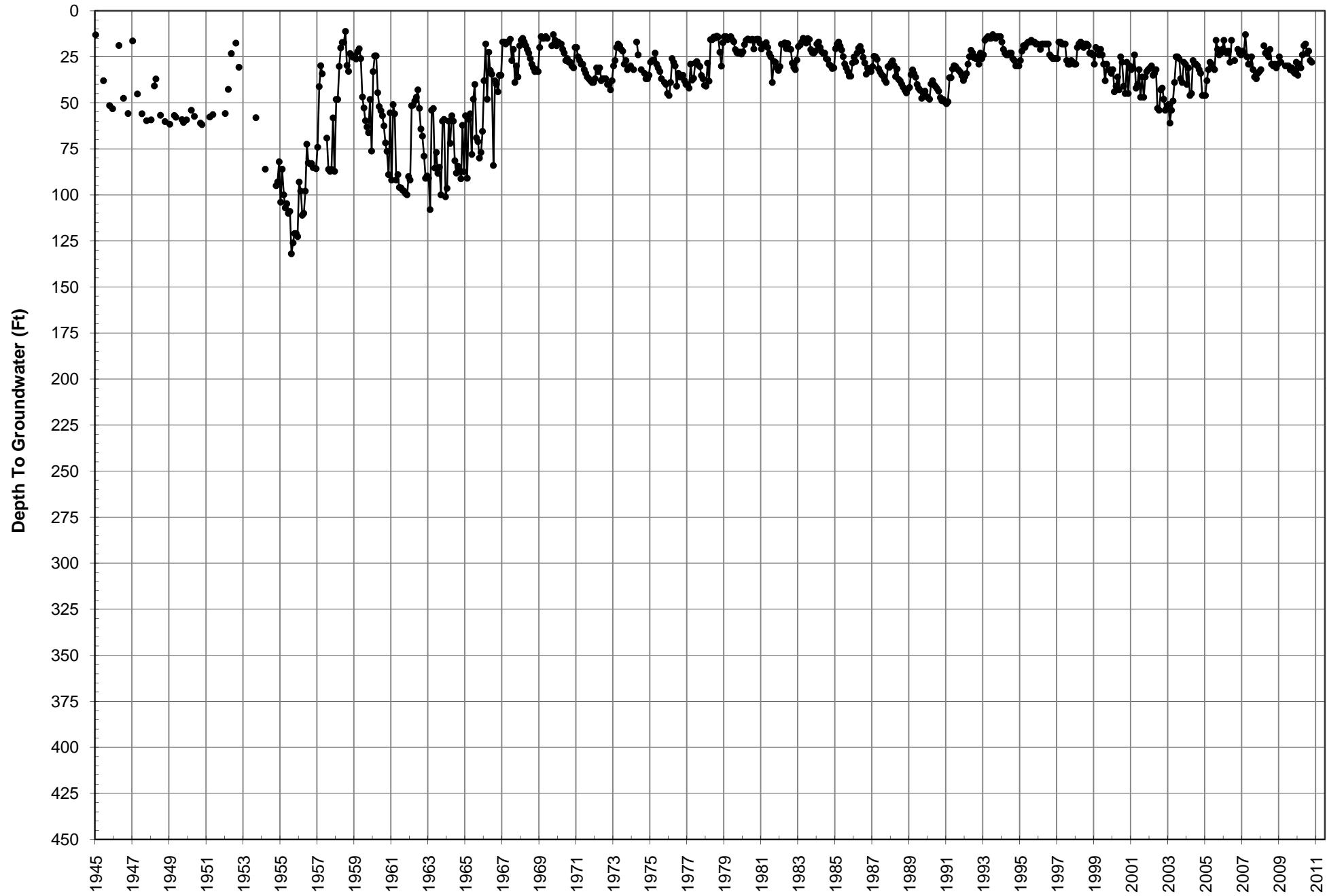
City of Redlands





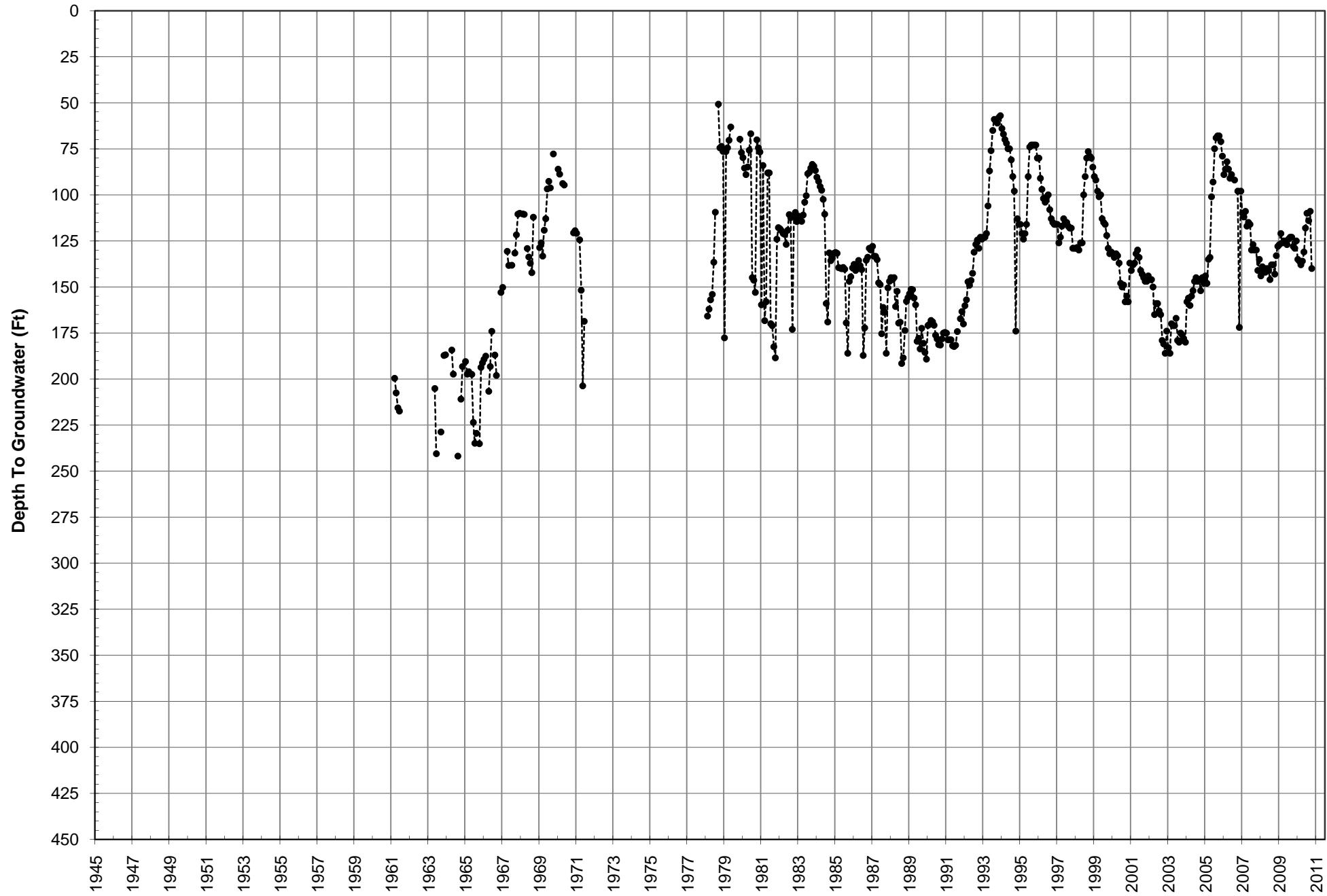
## East Lugonia #3 Index Well Hydrograph

City of Redlands



# Agate #1 Index Well Hydrograph

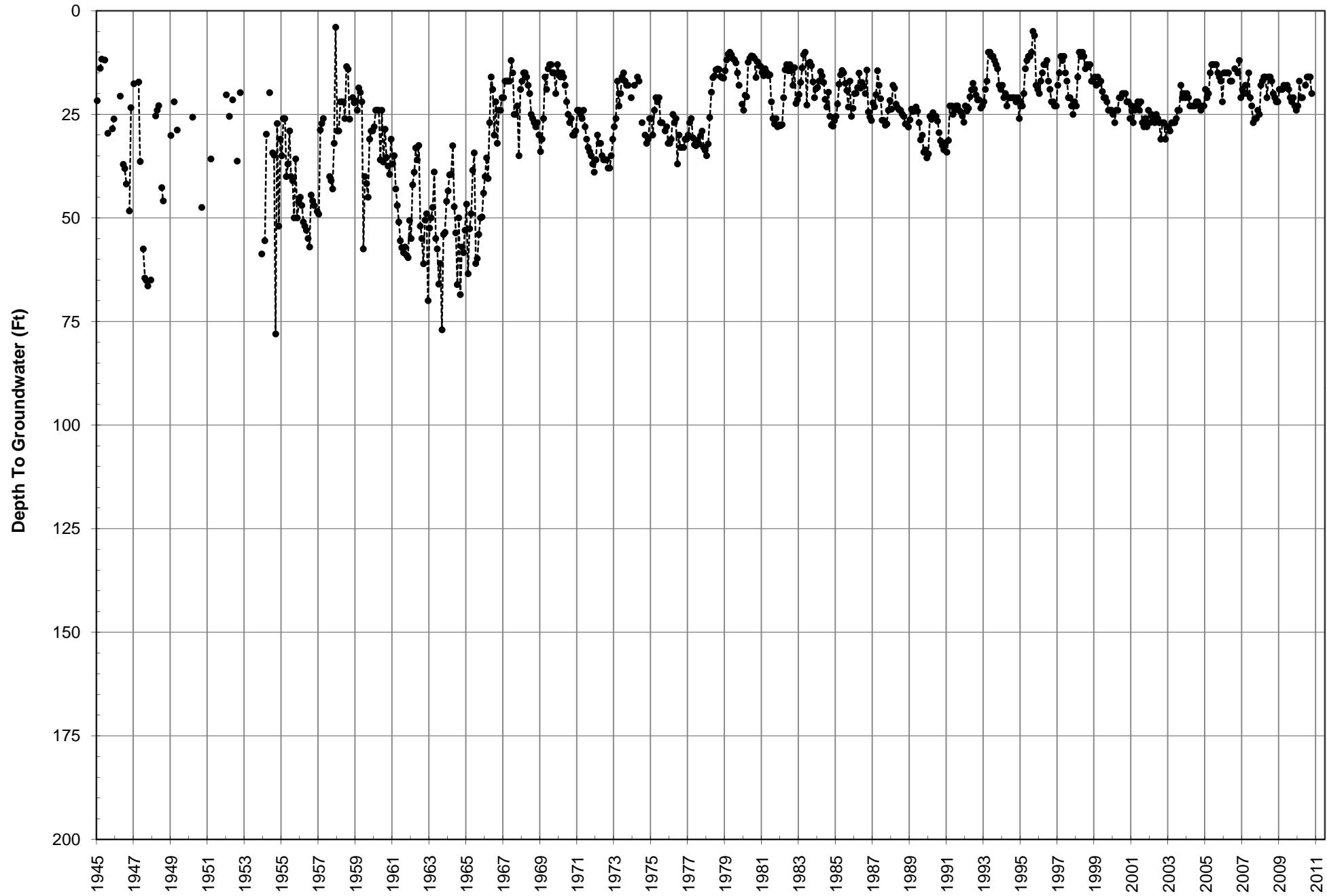
**City of Redlands**





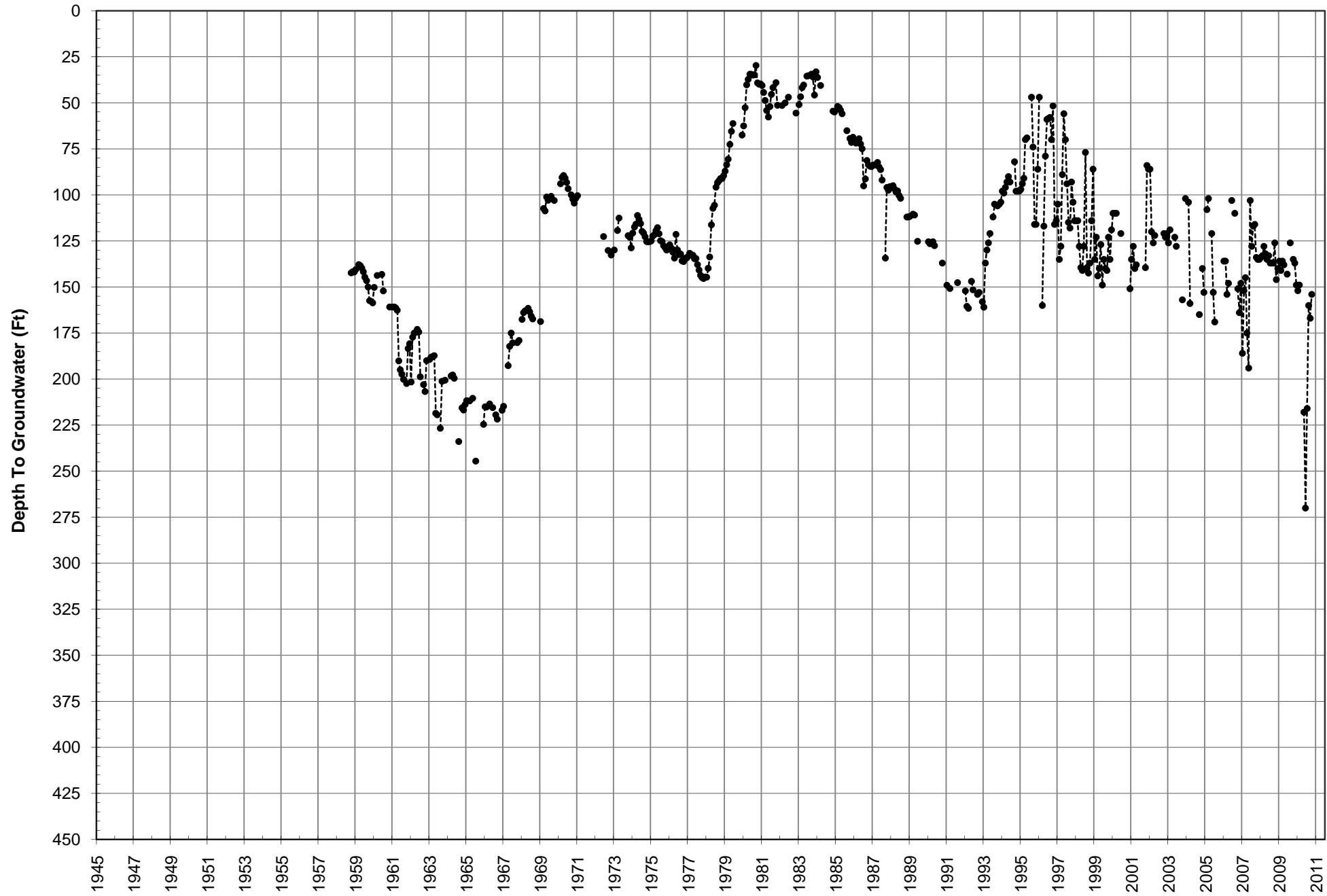
## Maguet #1 Index Well Hydrograph

City of Redlands



## Orange St. Index Well Hydrograph

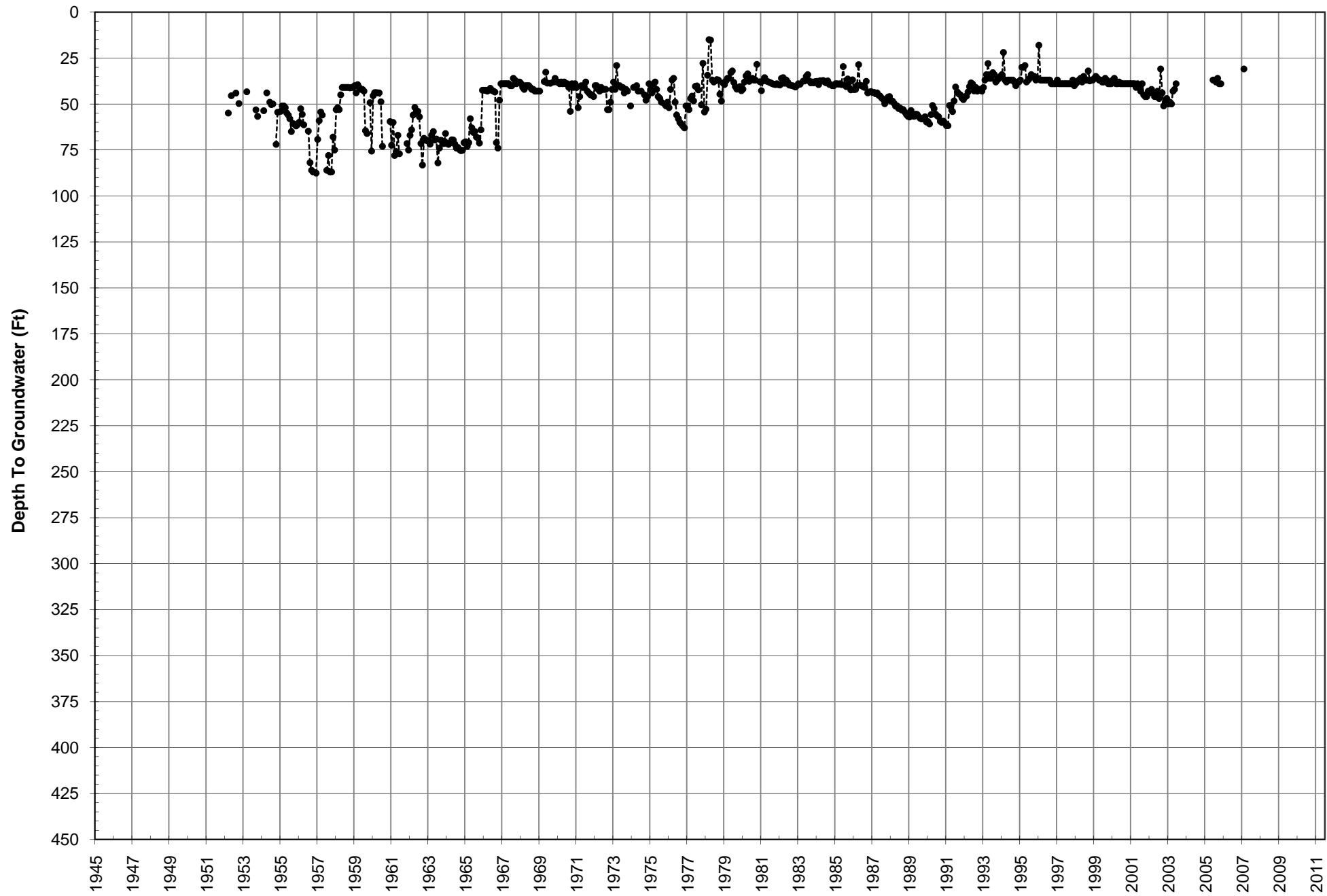
**City of Redlands**





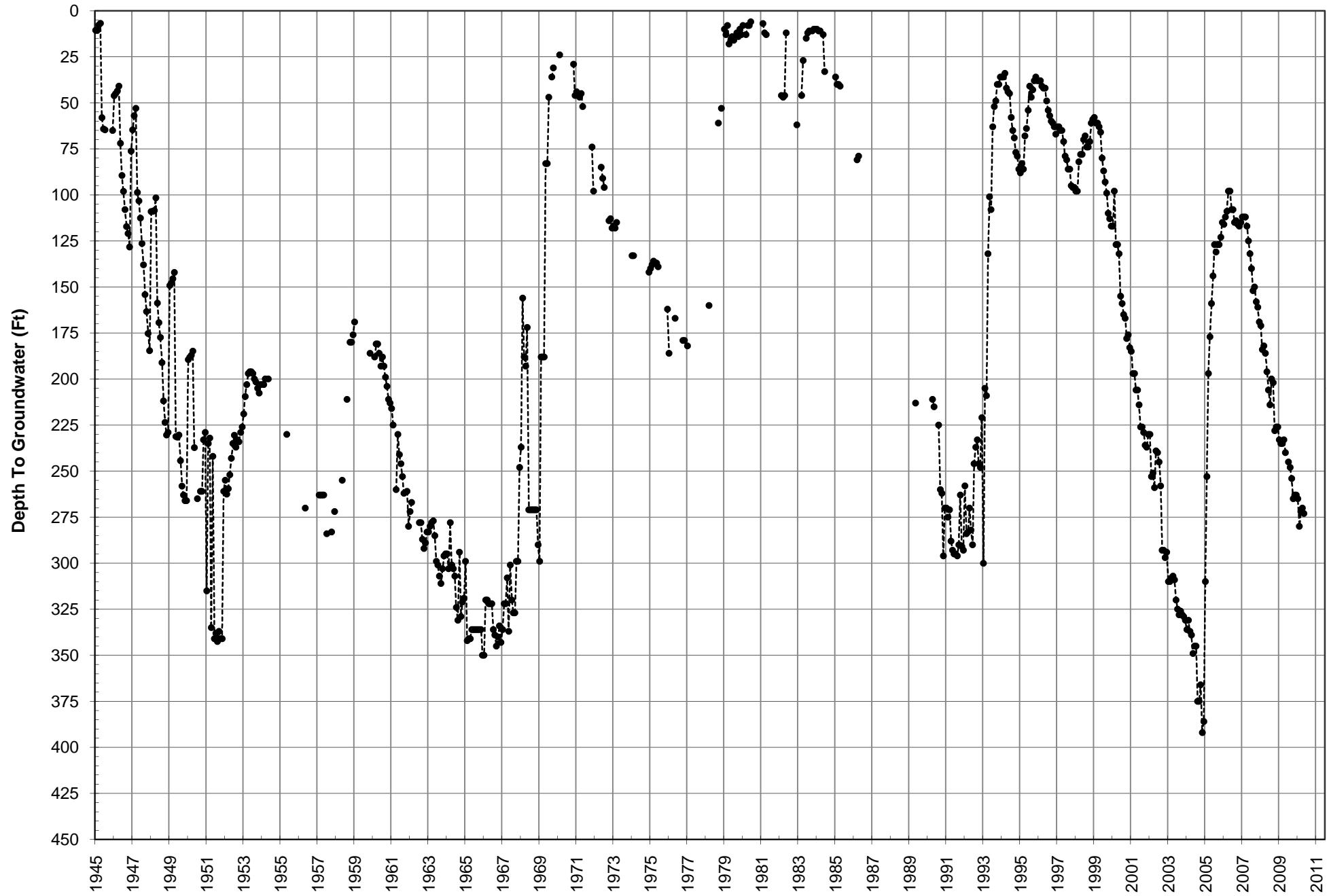
## East Lugonia #2 Index Well Hydrograph

City of Redlands



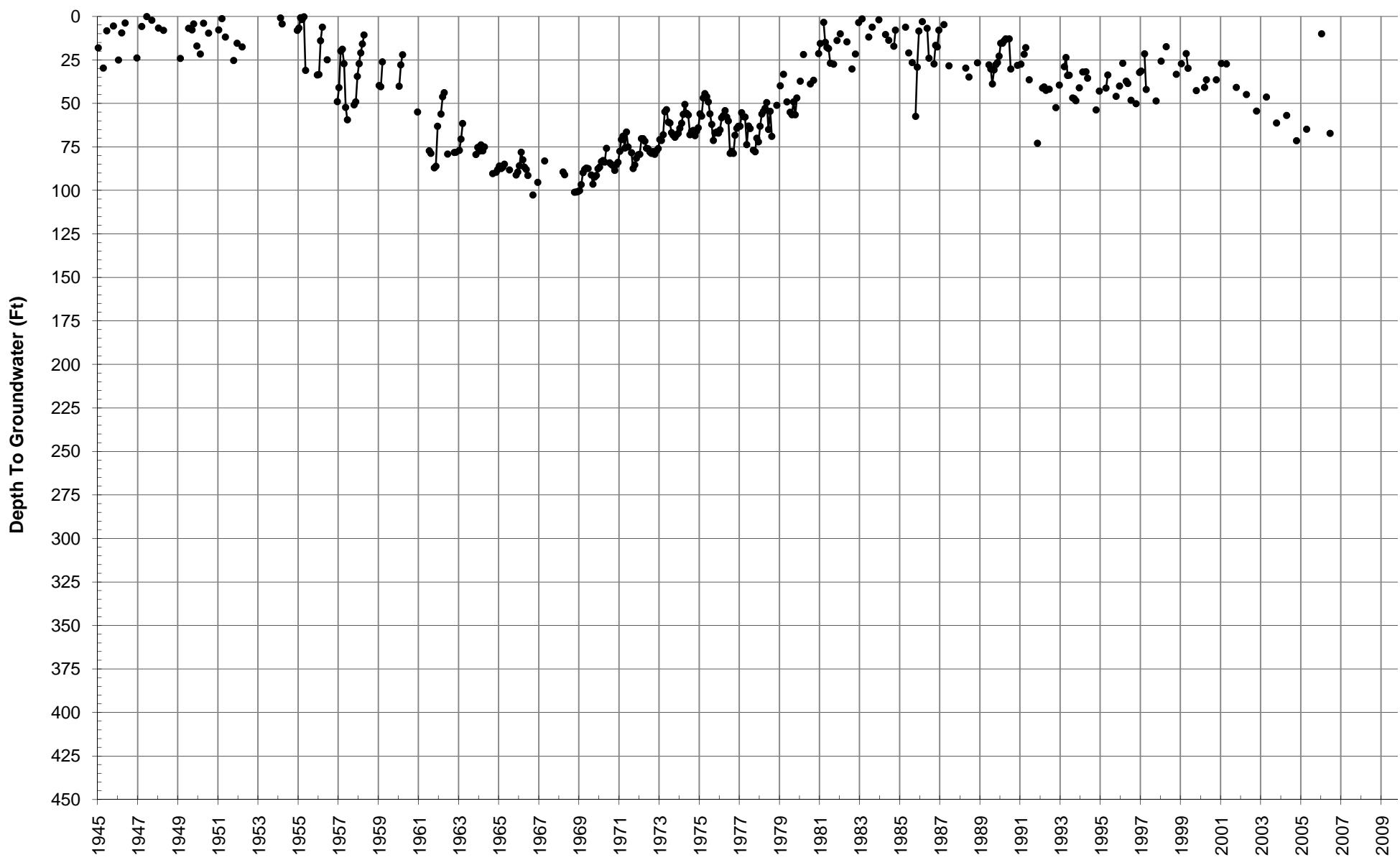
# City No. 1 Index Well Hydrograph

City of Rialto



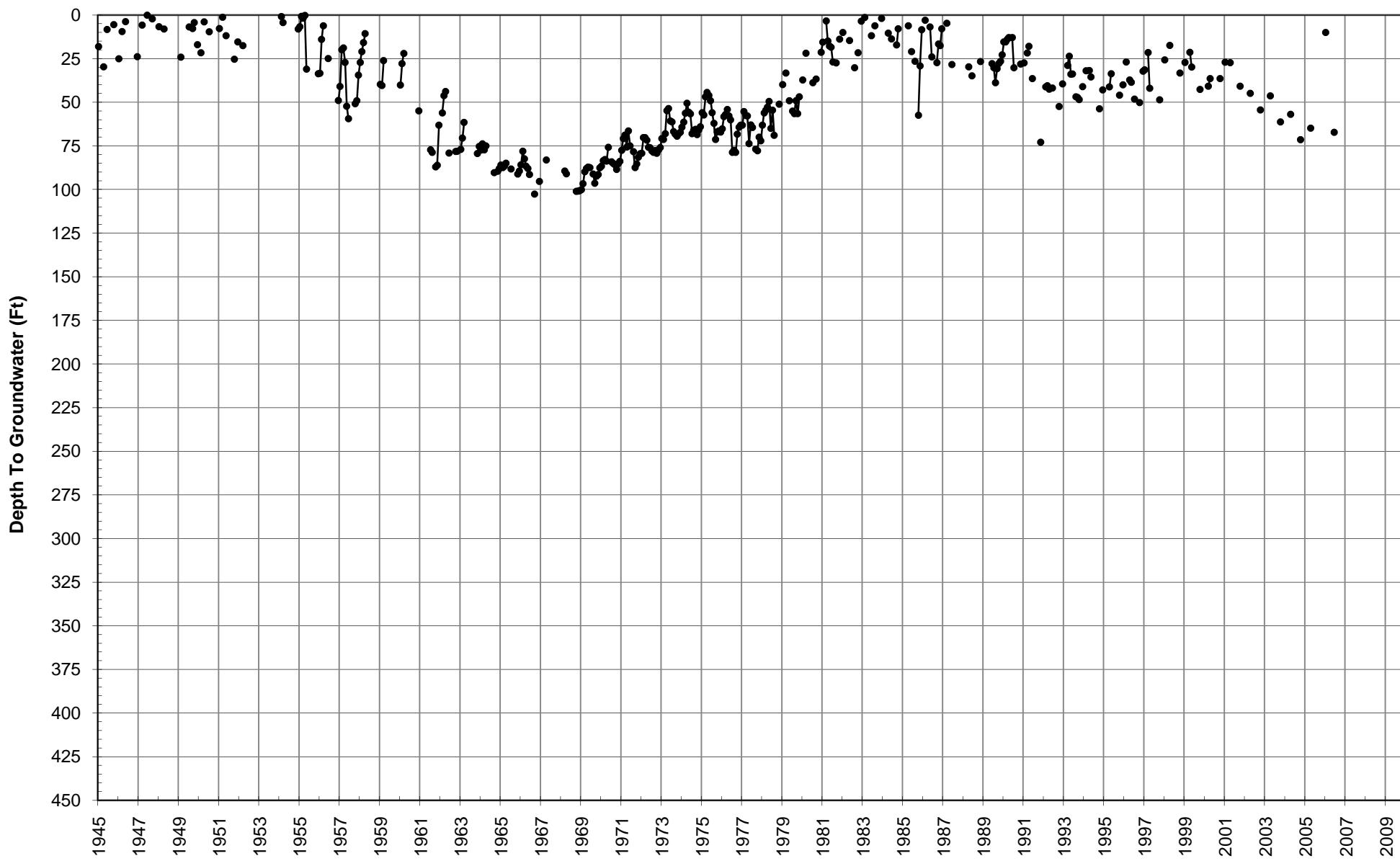
Thorne No. 2  
Index Well Hydrograph

City of Riverside



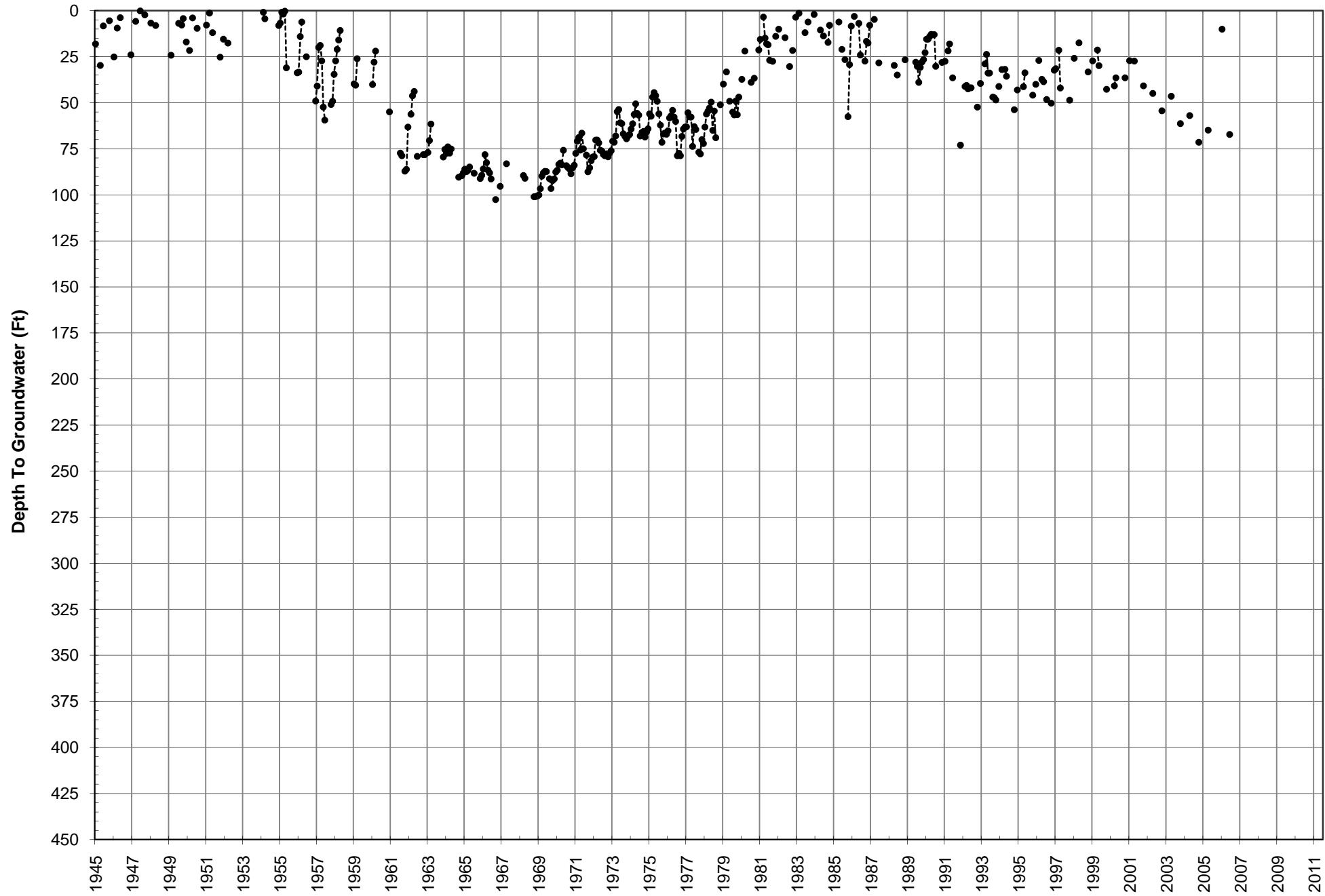
Thorne No. 9  
Index Well Hydrograph

City of Riverside



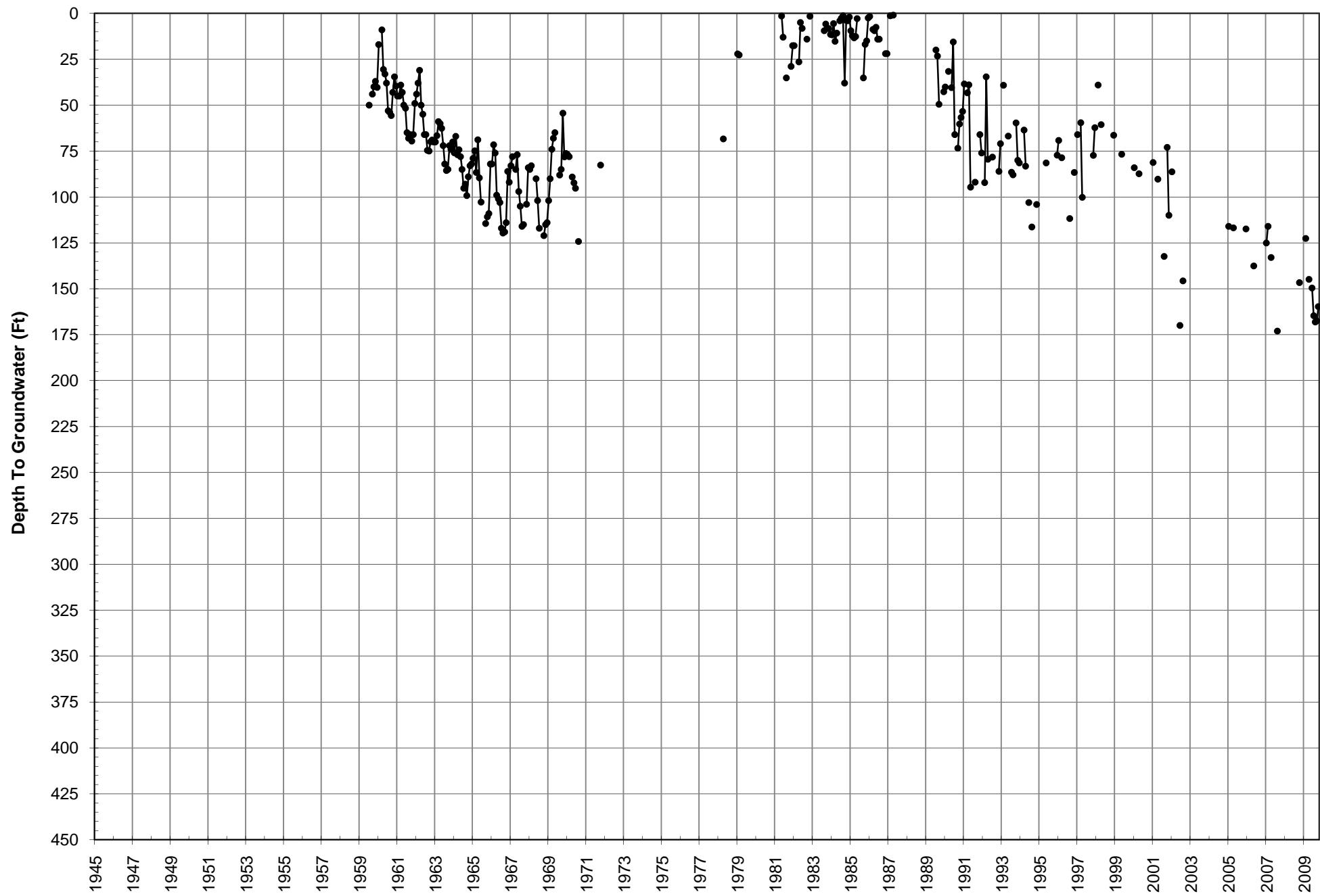
## Thorne No. 10 Index Well Hydrograph

City of Riverside



**Stewart No. 19**  
**Index Well Hydrograph**

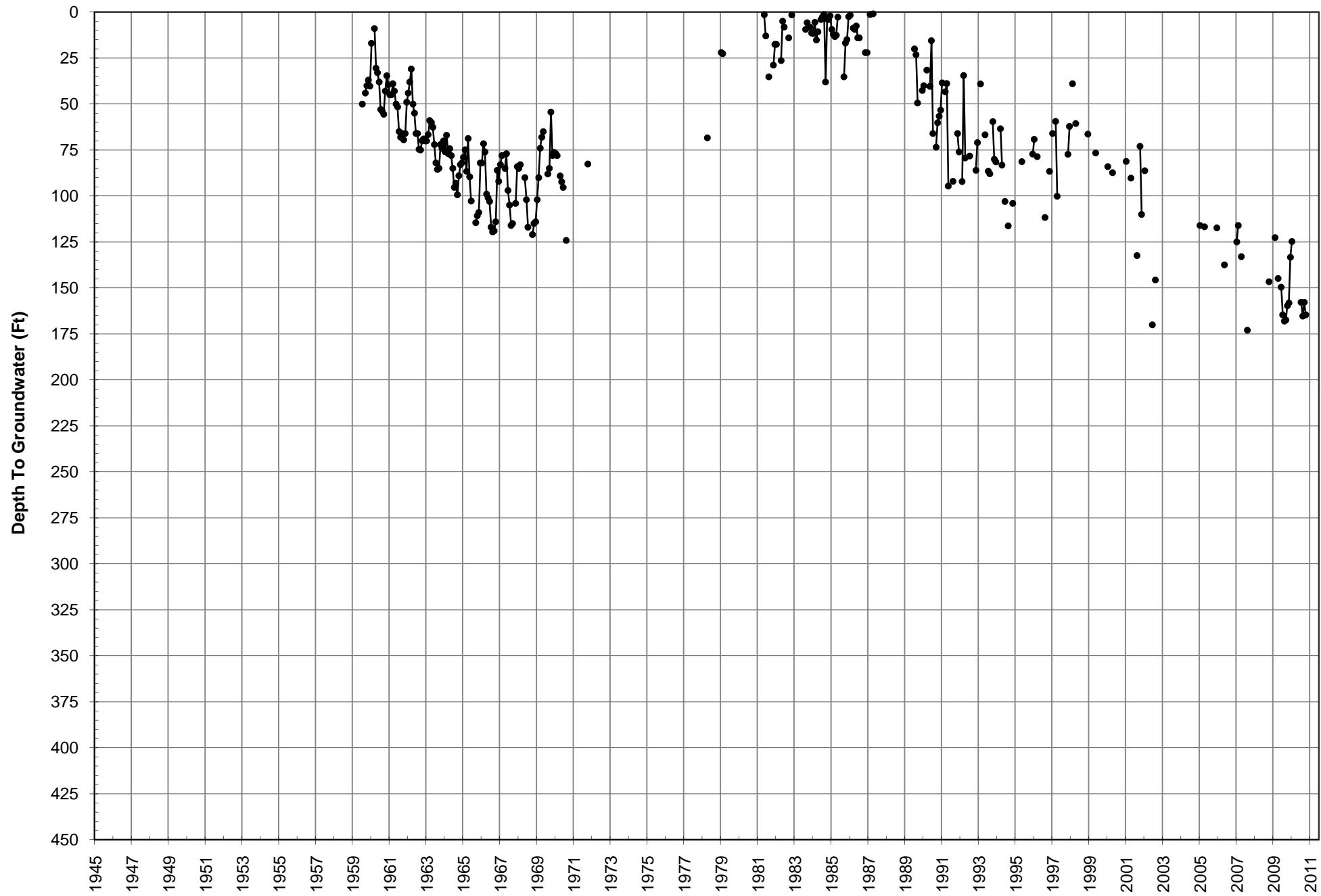
**City of Riverside**





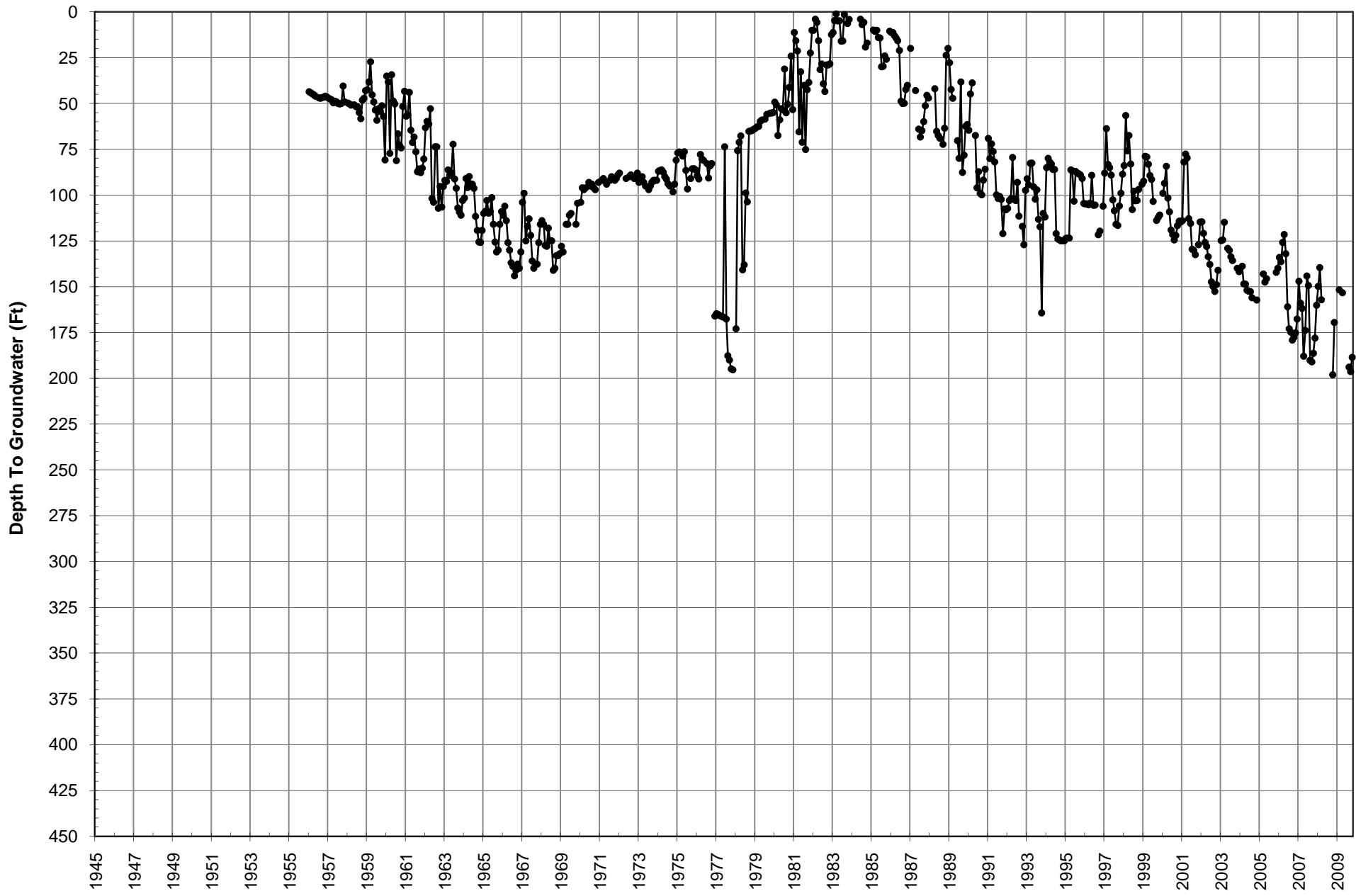
## Stewart No. 20 Index Well Hydrograph

City of Riverside



Raub 1  
Index Well Hydrograph

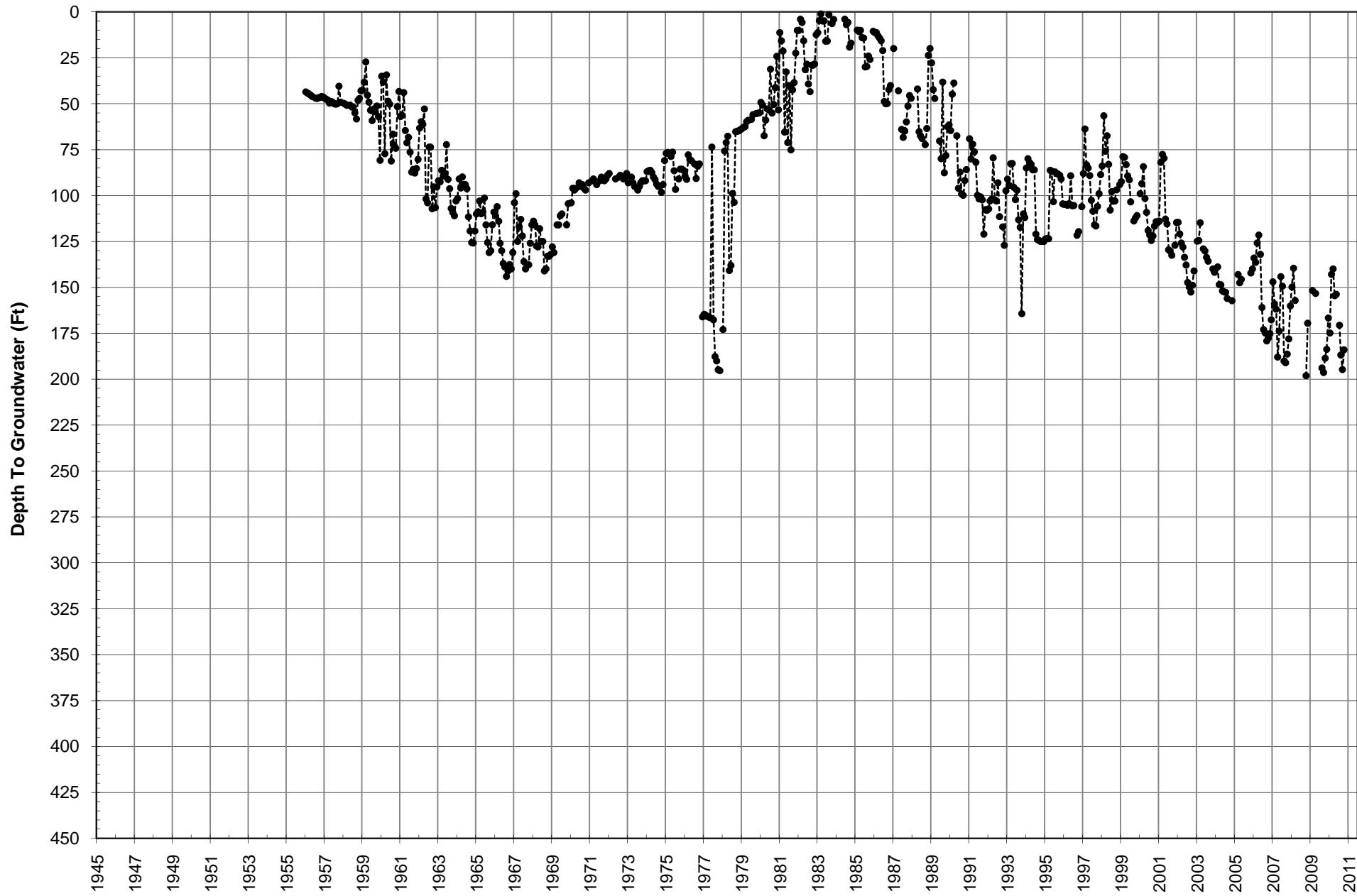
City of Riverside





## Cooley D Index Well Hydrograph

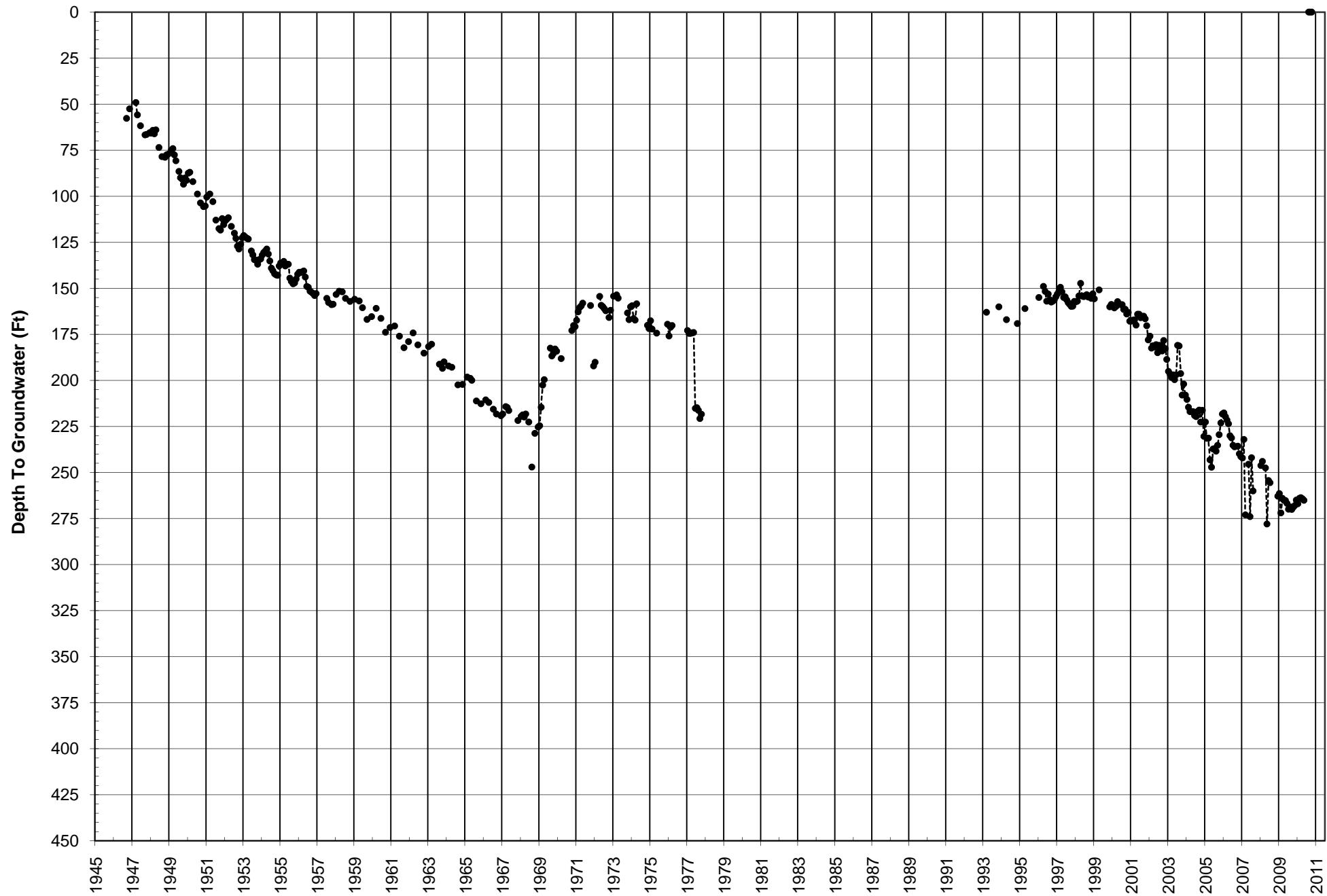
City of Riverside





## Baseline & California Index Well Hydrograph

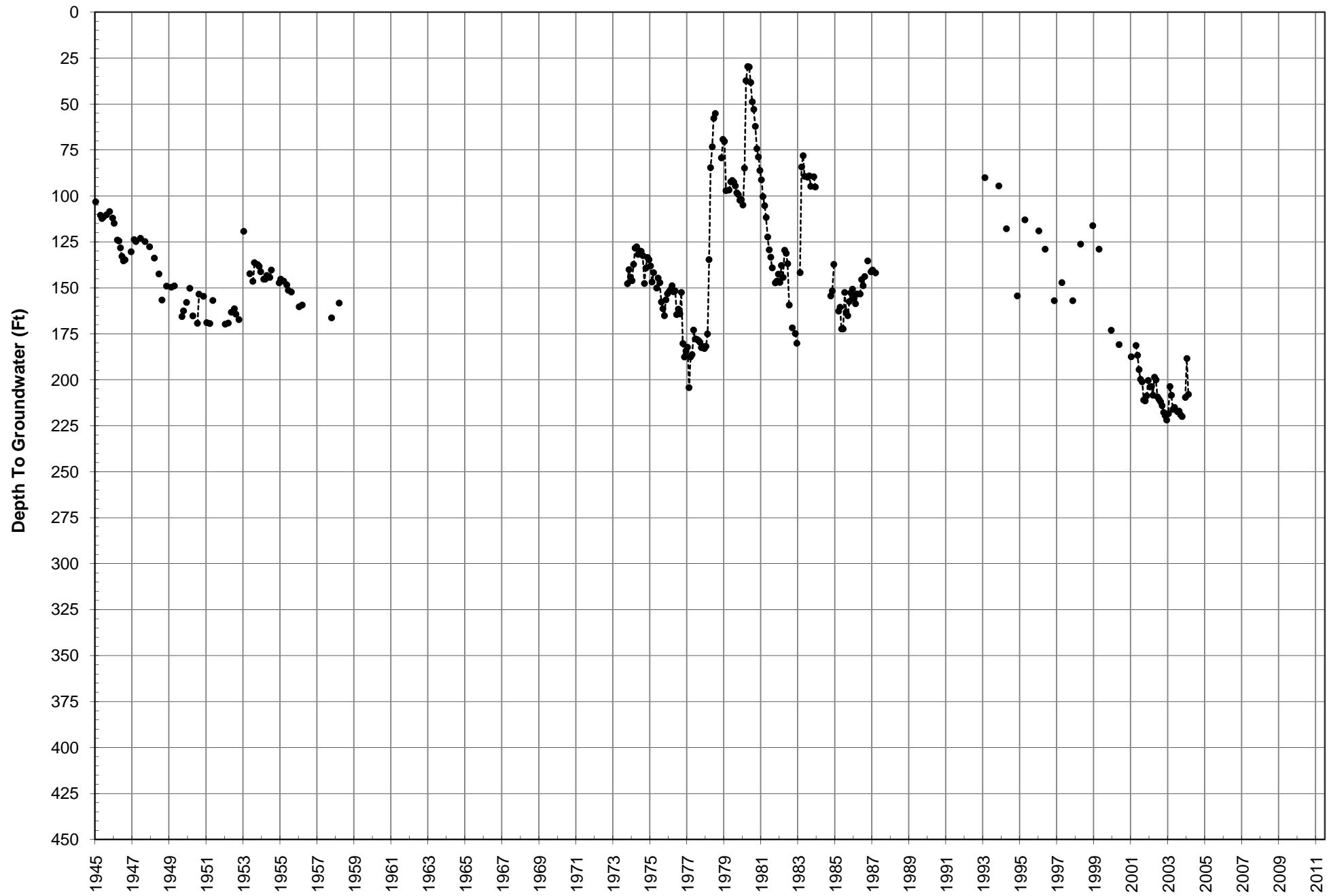
**City of San Bernardino**





## Cajon Well No. 1 Index Well Hydrograph

**City of San Bernardino**





## Cajon Canyon Index Well Hydrograph

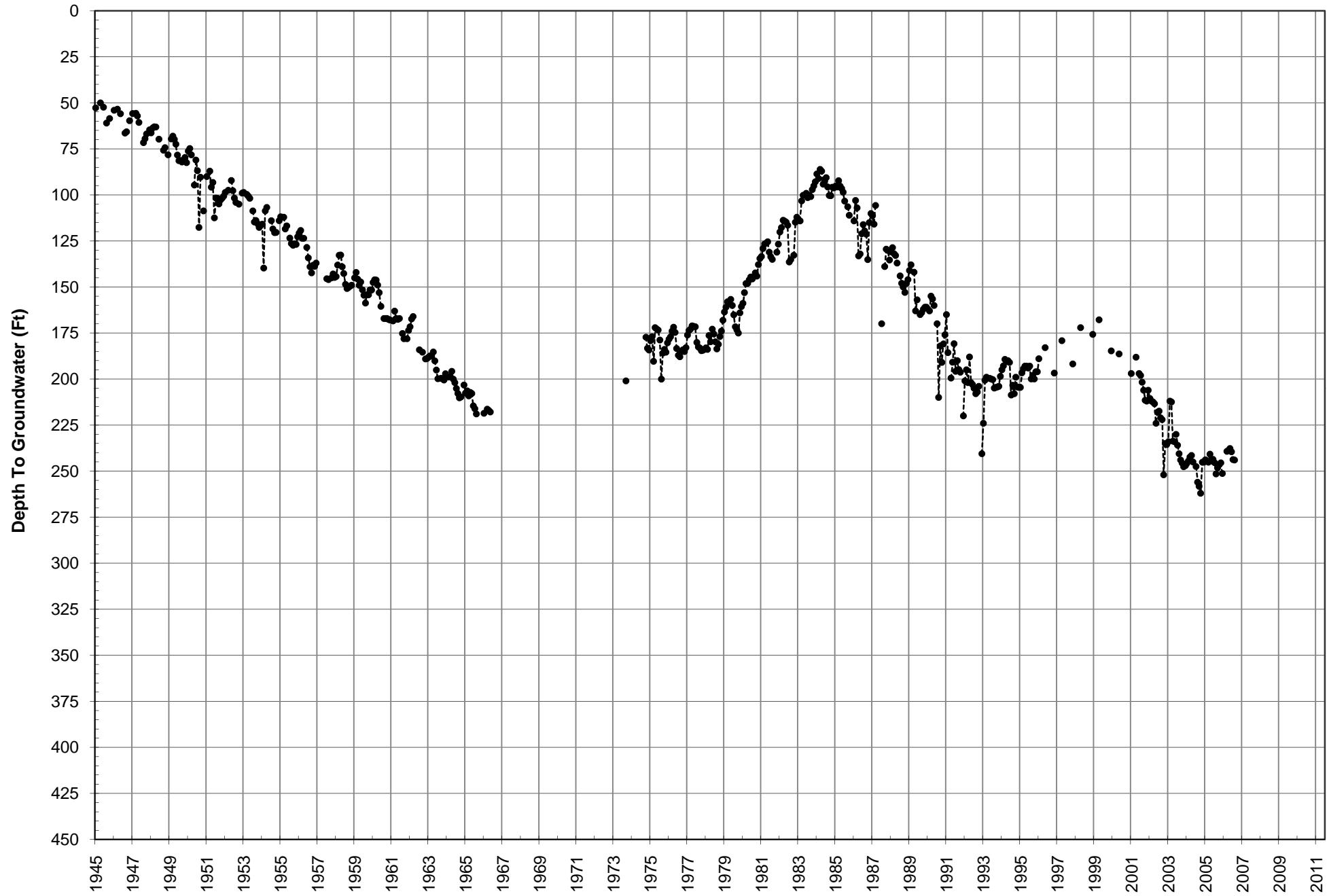
**City of San Bernardino**





## Perris Hill No. 3 Index Well Hydrograph

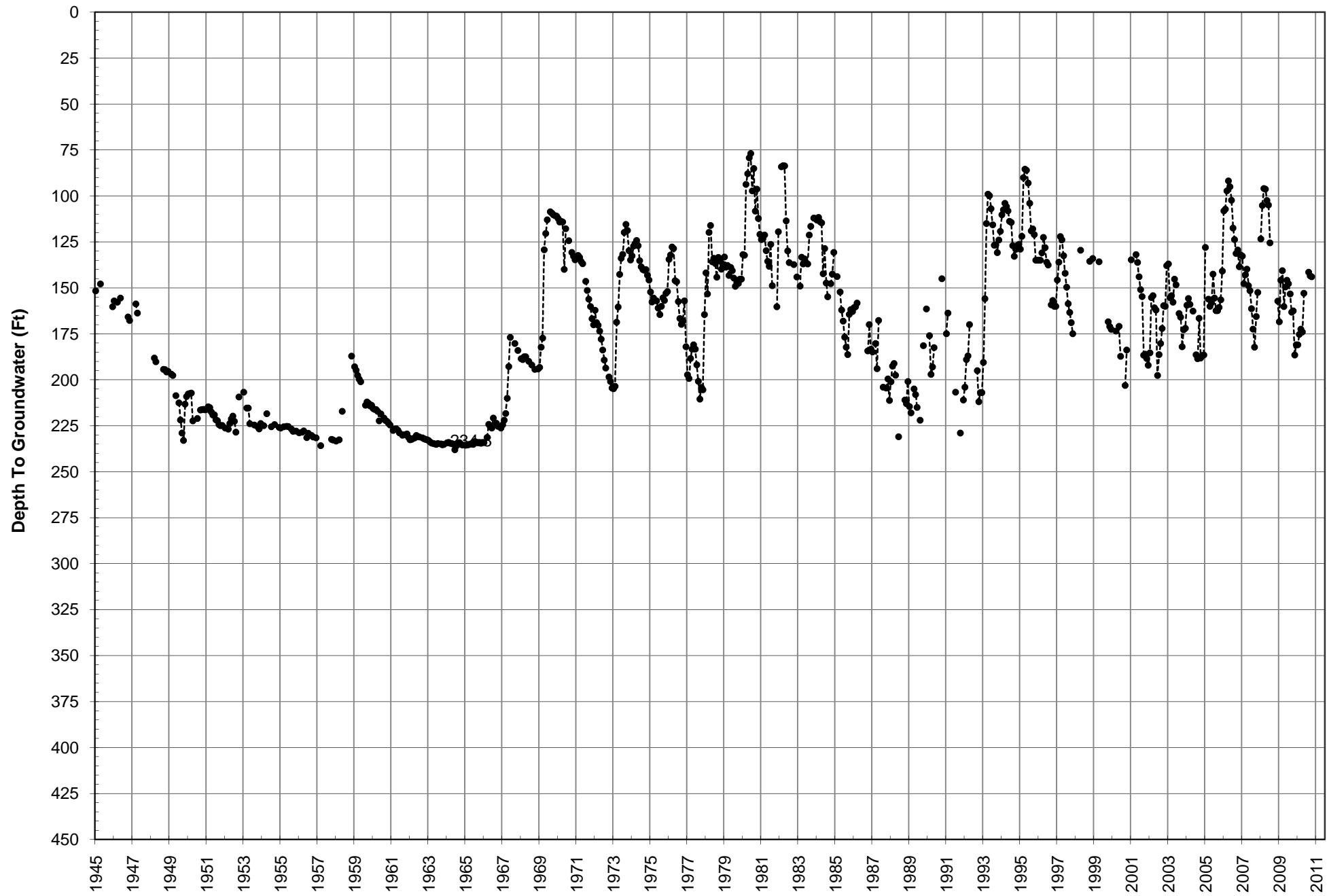
**City of San Bernardino**





## Devil Canyon No. 1 Index Well Hydrograph

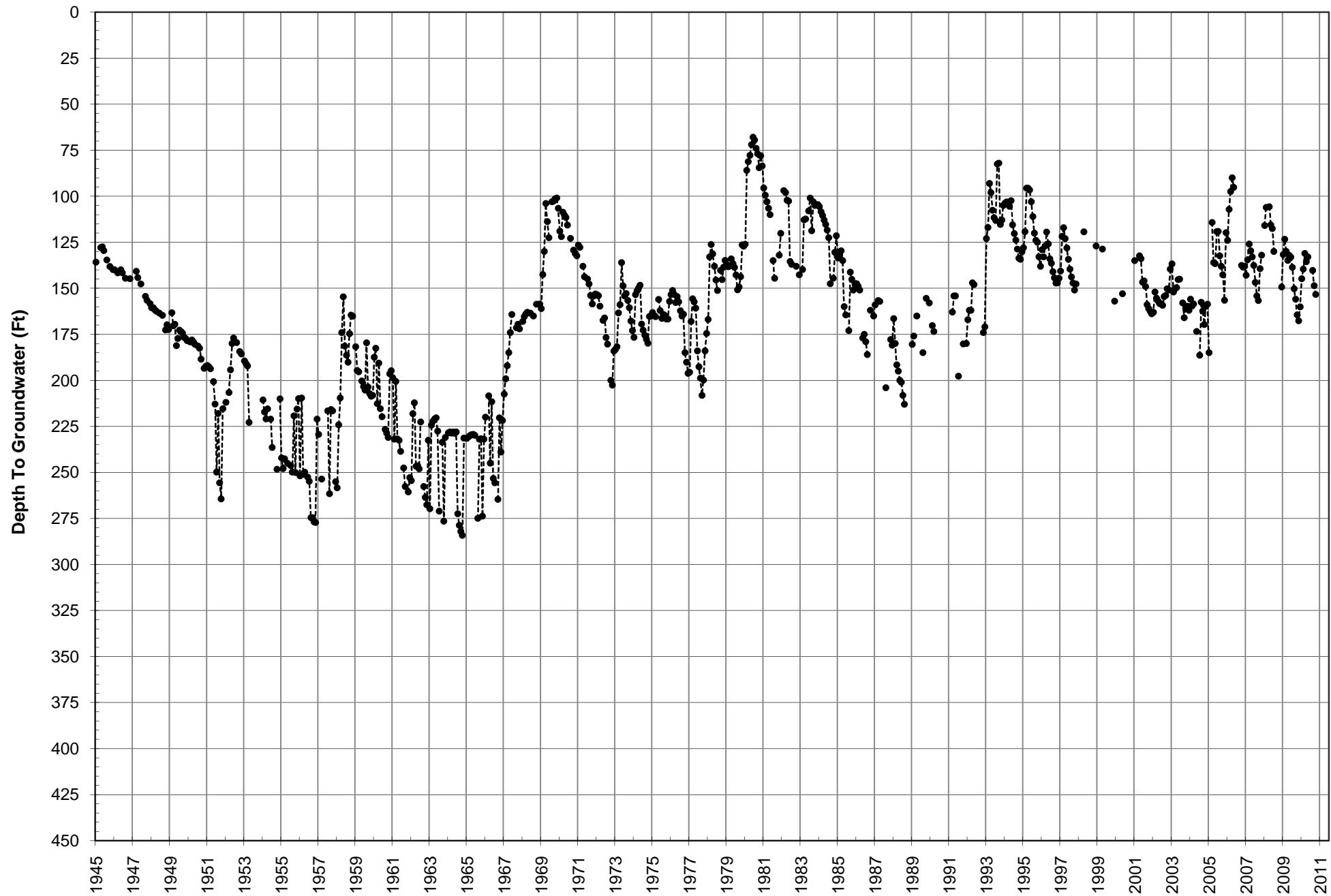
**City of San Bernardino**





## Devil Canyon No. 2 Index Well Hydrograph

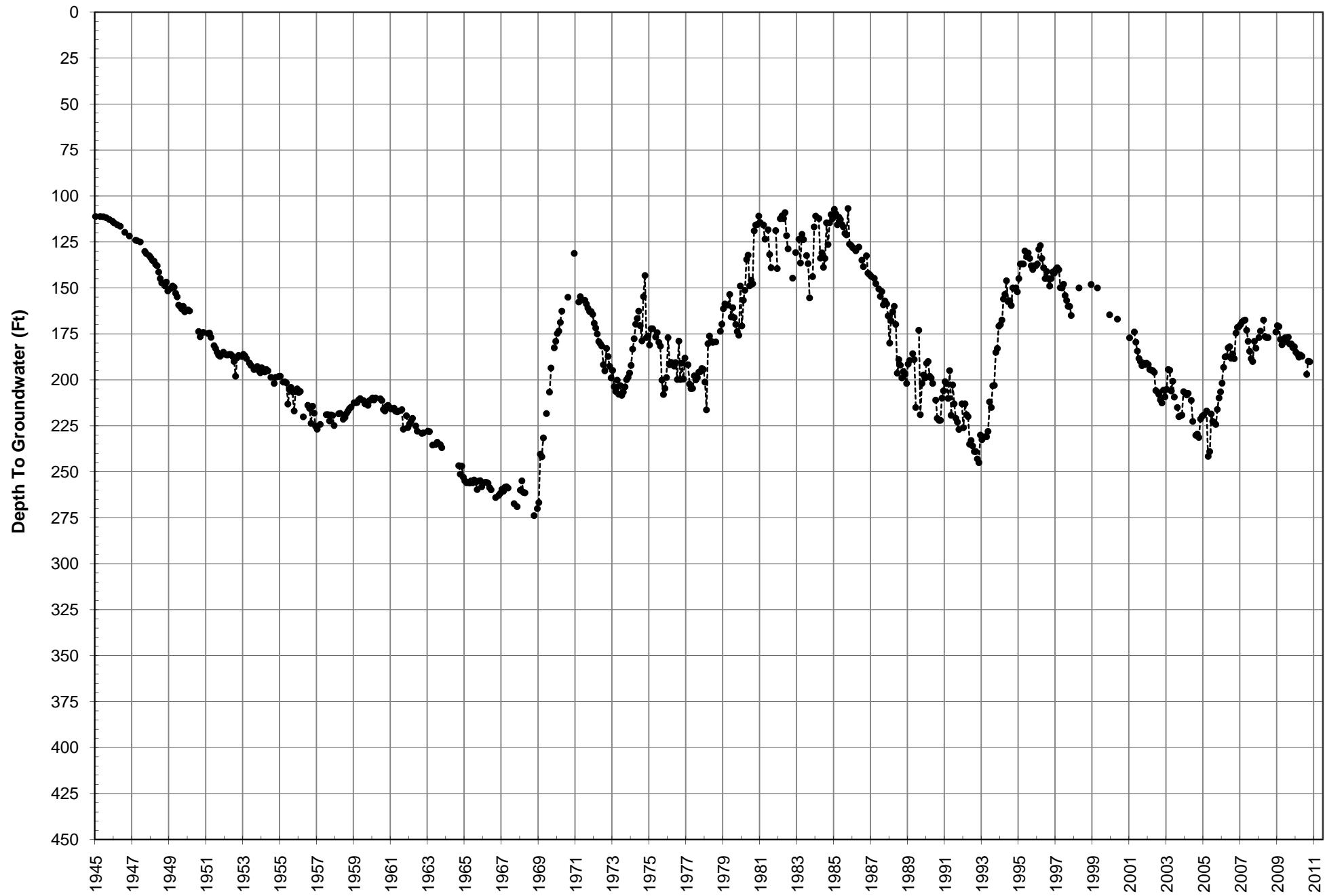
**City of San Bernardino**





## Newmark No. 1 Index Well Hydrograph

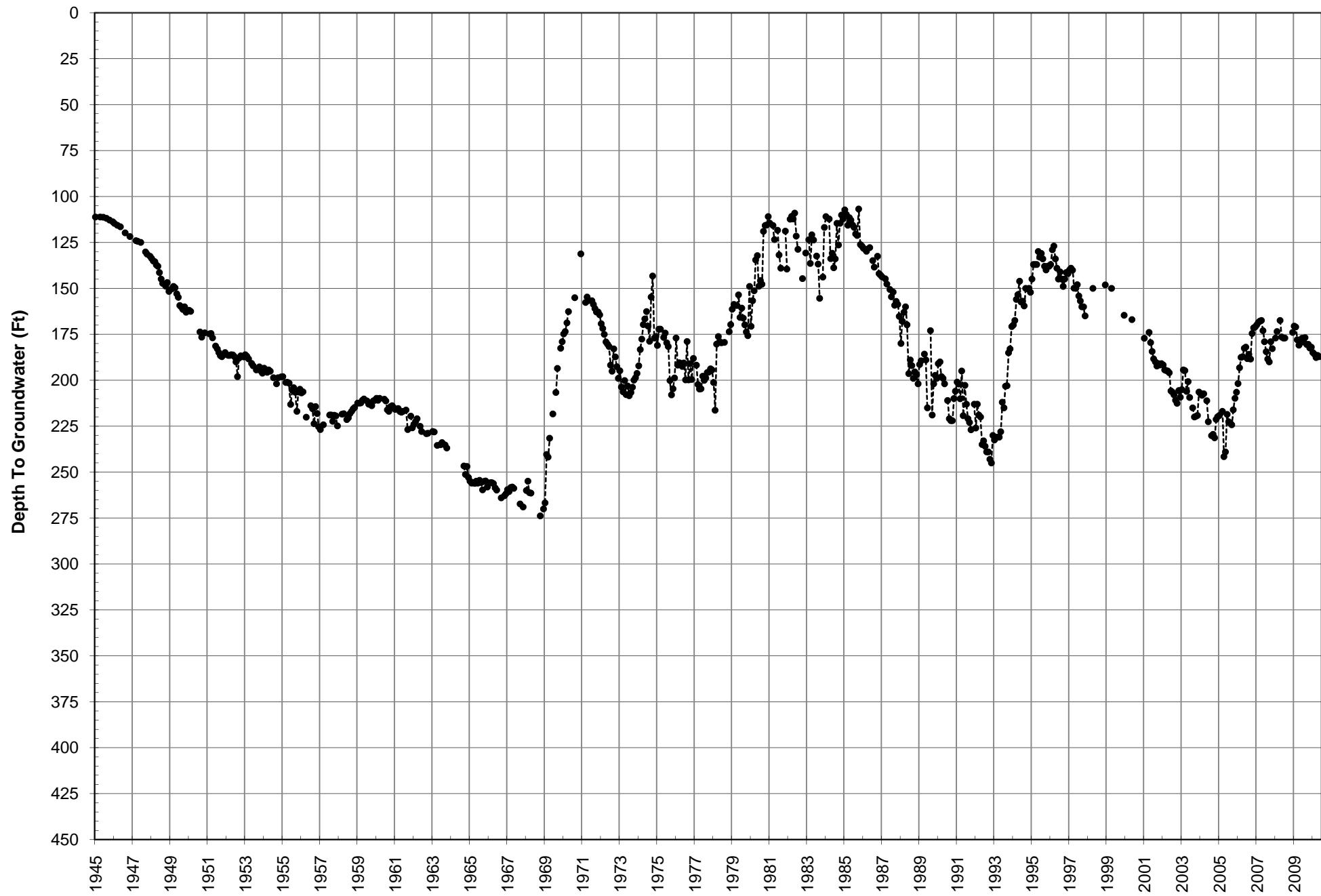
**City of San Bernardino**





## EPA Well No. 003 Index Well Hydrograph

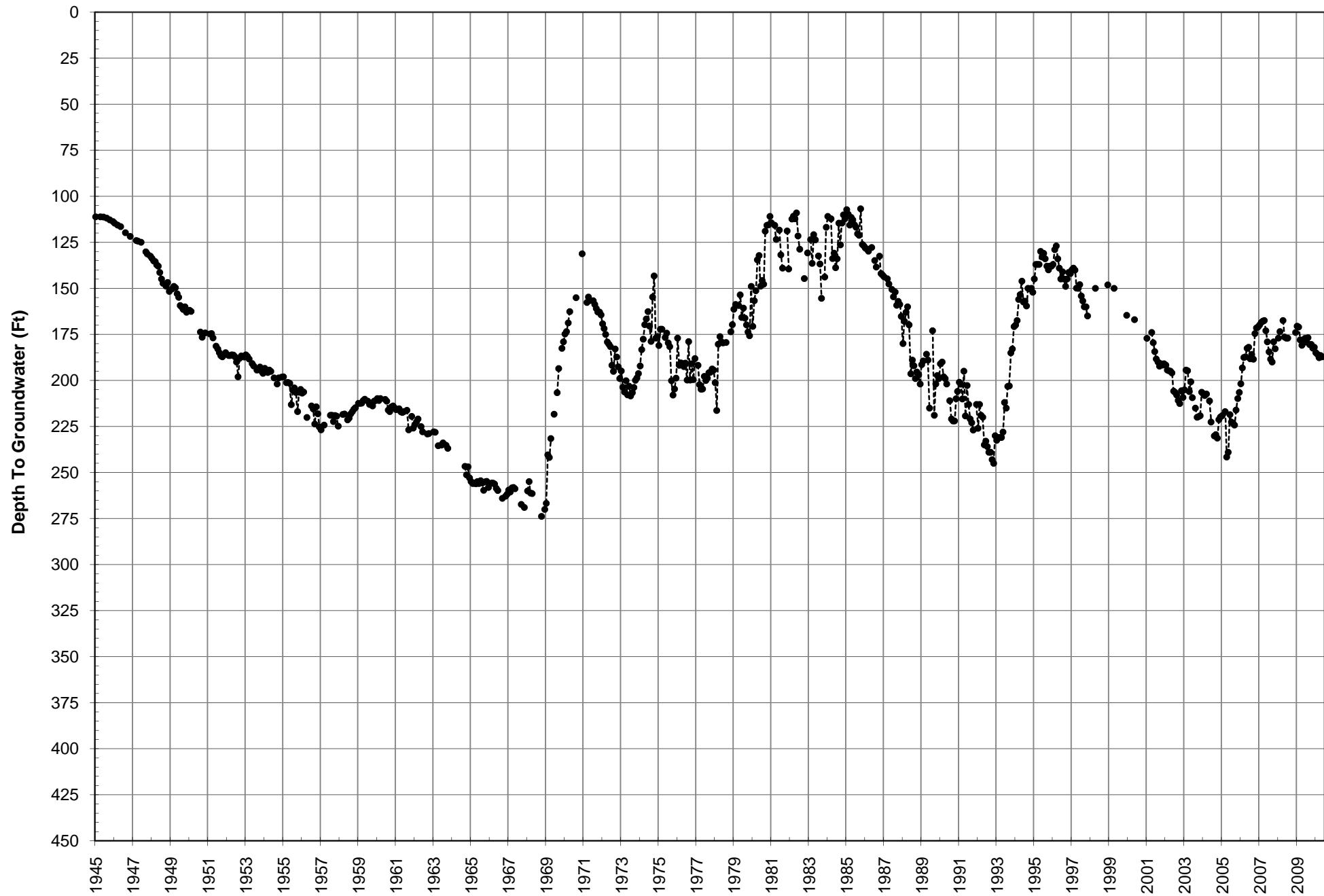
**City of San Bernardino**





## EPA Well No. 110 Index Well Hydrograph

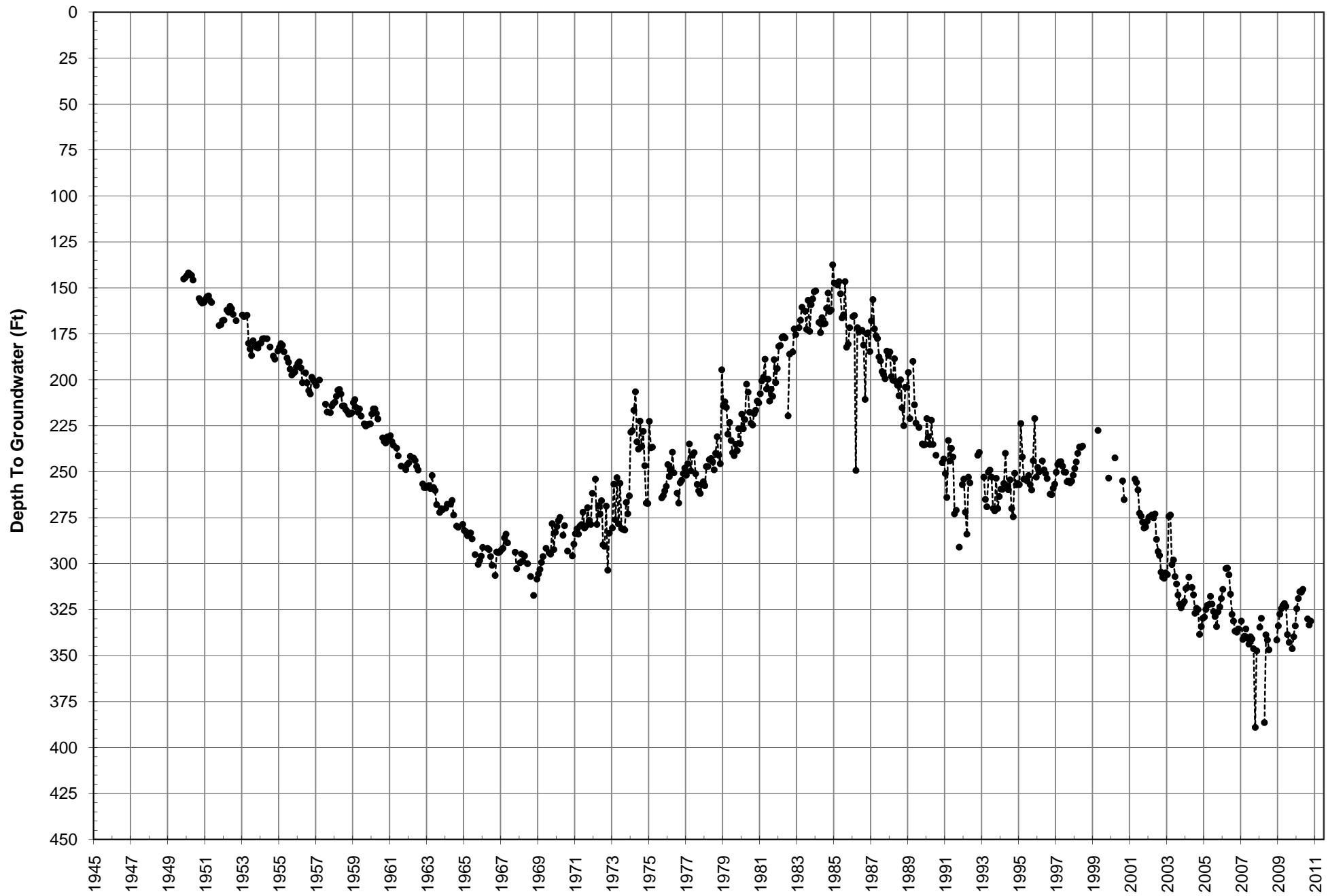
**City of San Bernardino**





## Waterman Ave. Index Well Hydrograph

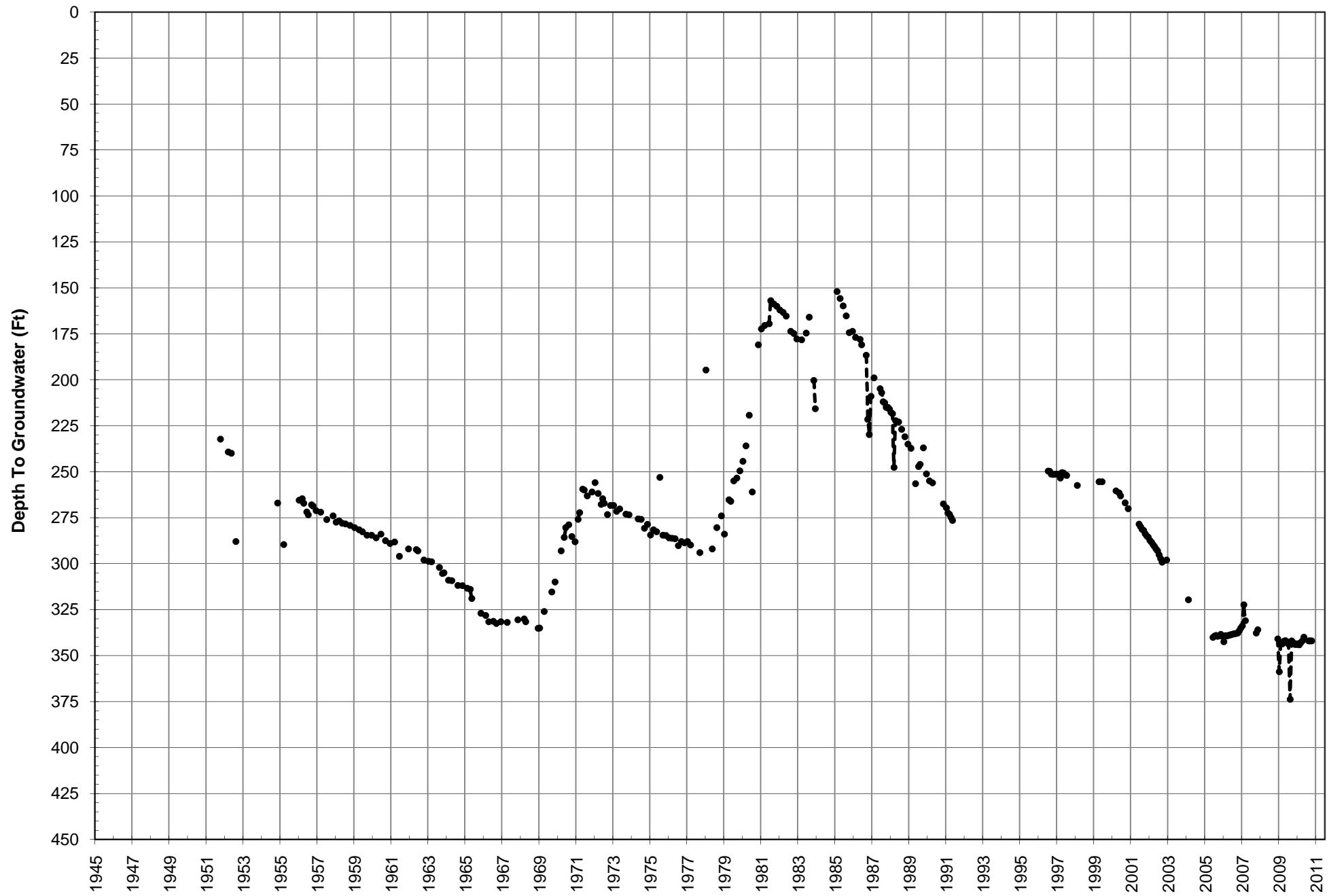
**City of San Bernardino**





## PaperBoard Index Well Hydrograph

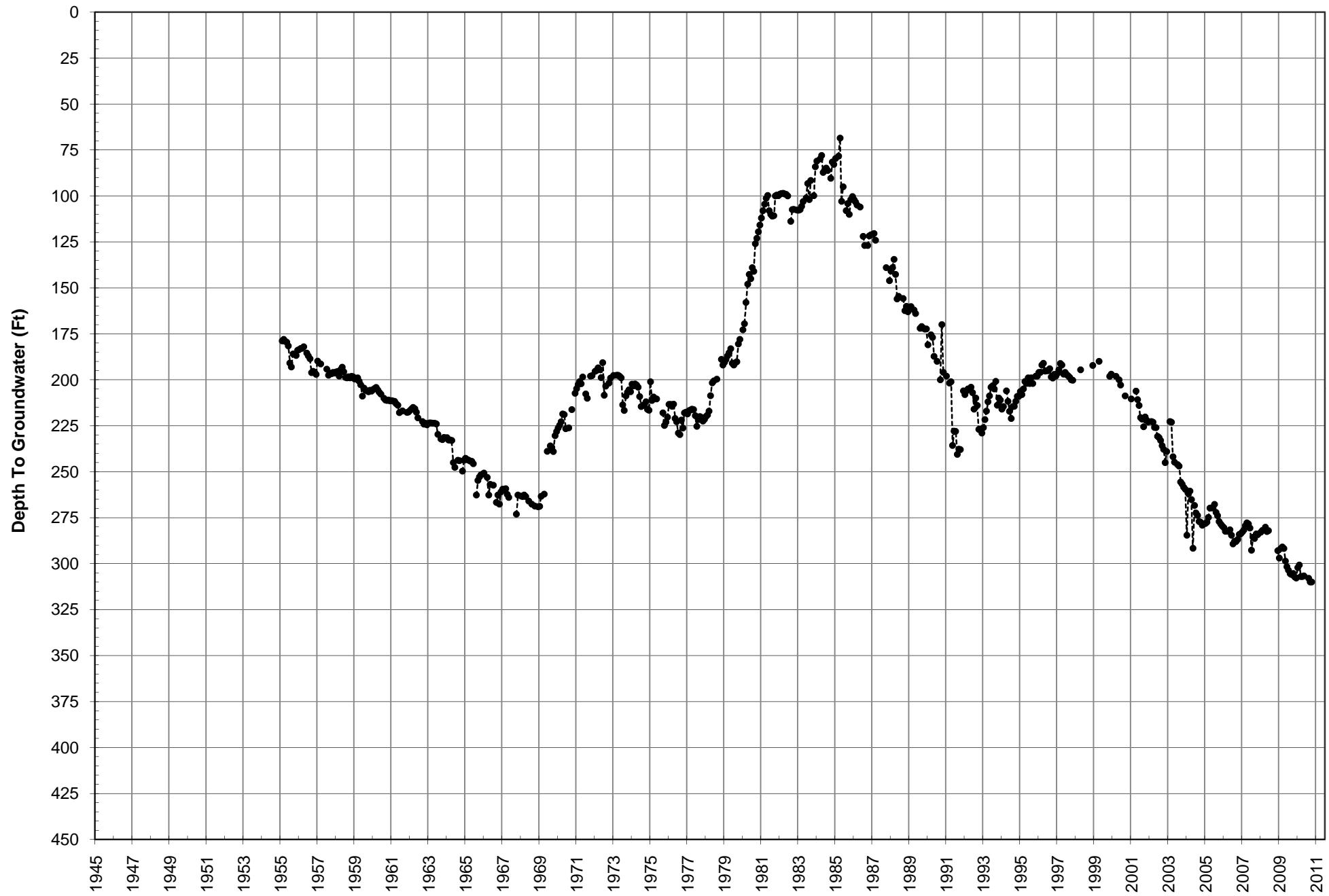
**City of San Bernardino**





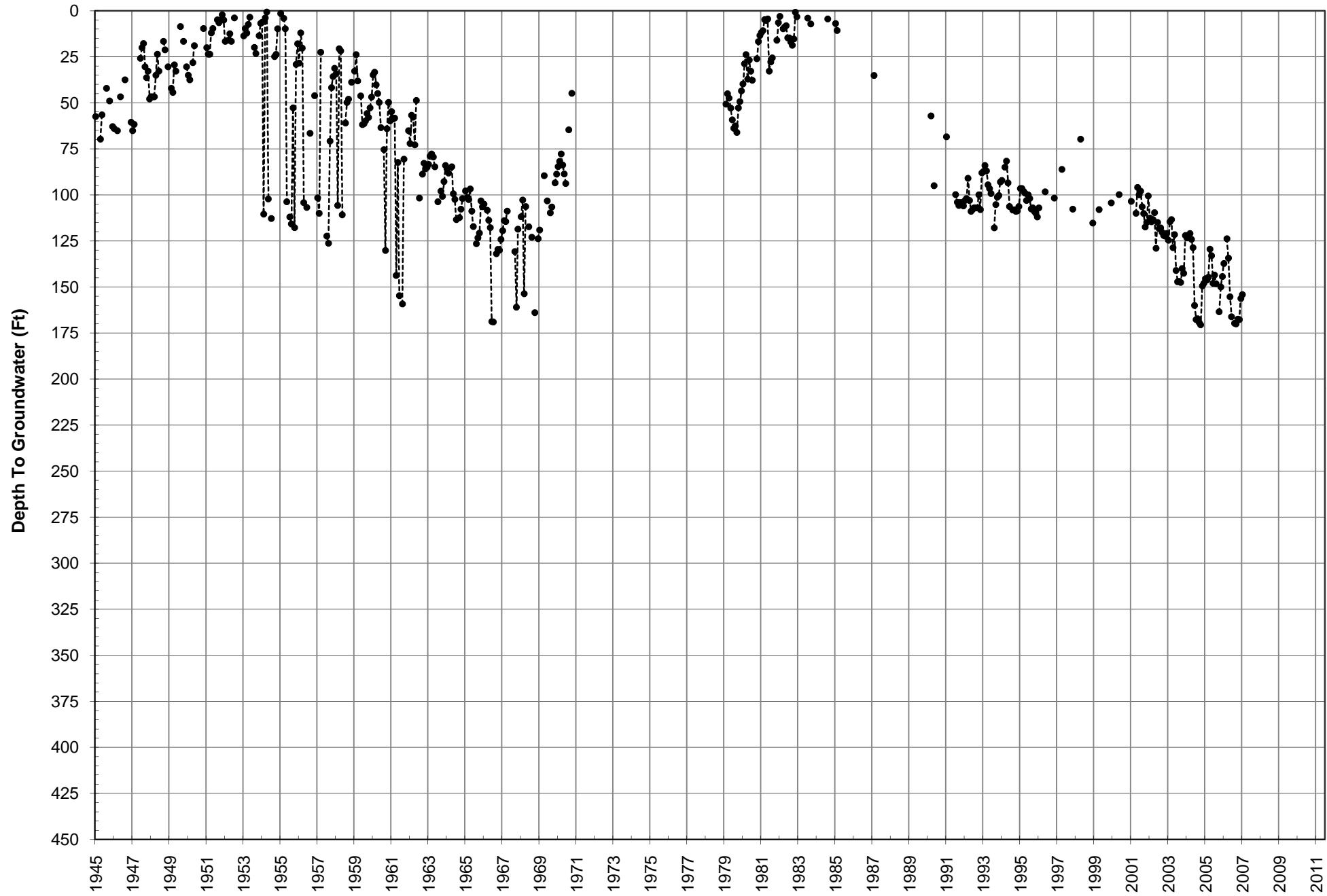
## 19th St. No. 2 Index Well Hydrograph

City of San Bernardino



Antil No. 5  
Index Well Hydrograph

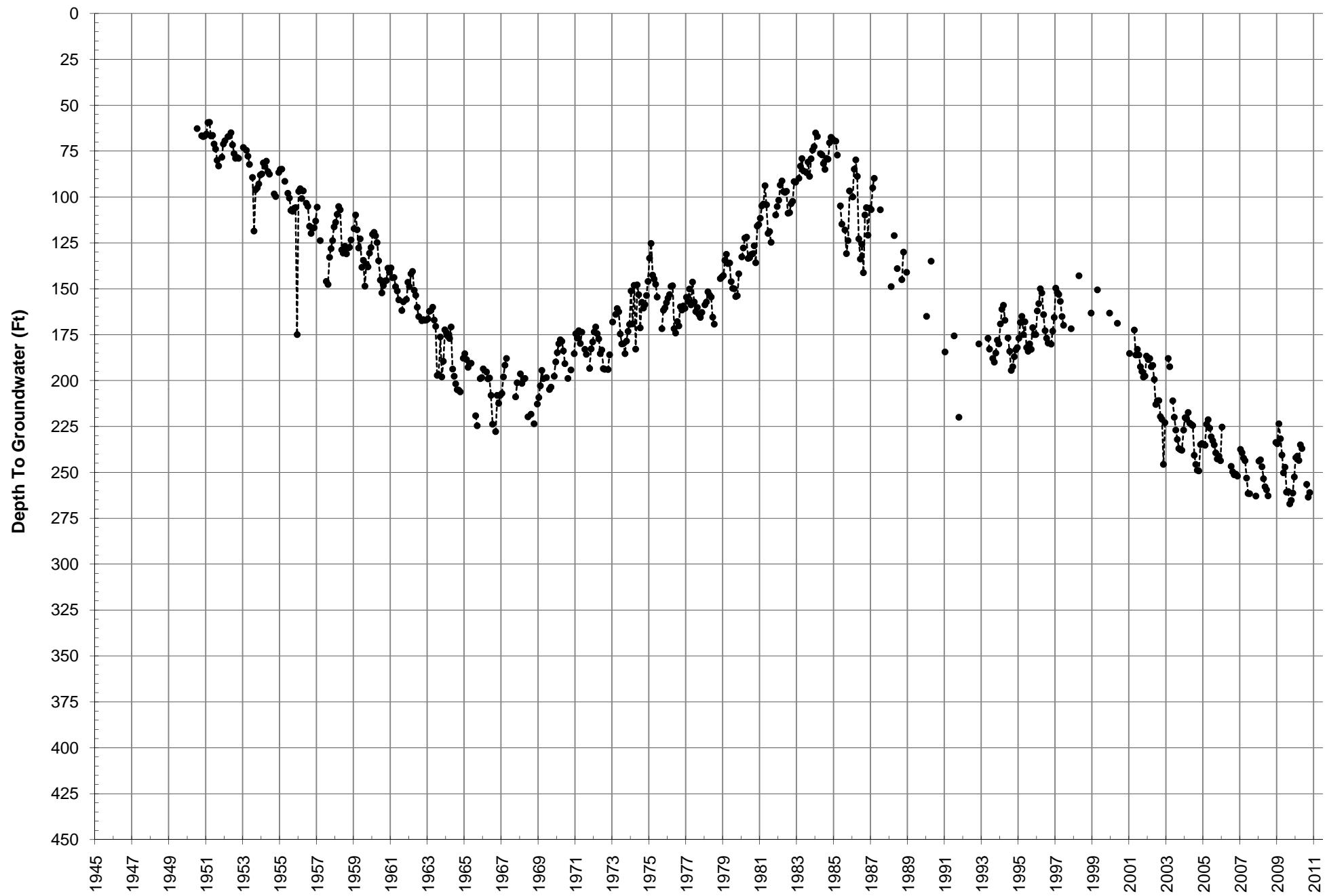
City of San Bernardino





## 16th St. Index Well Hydrograph

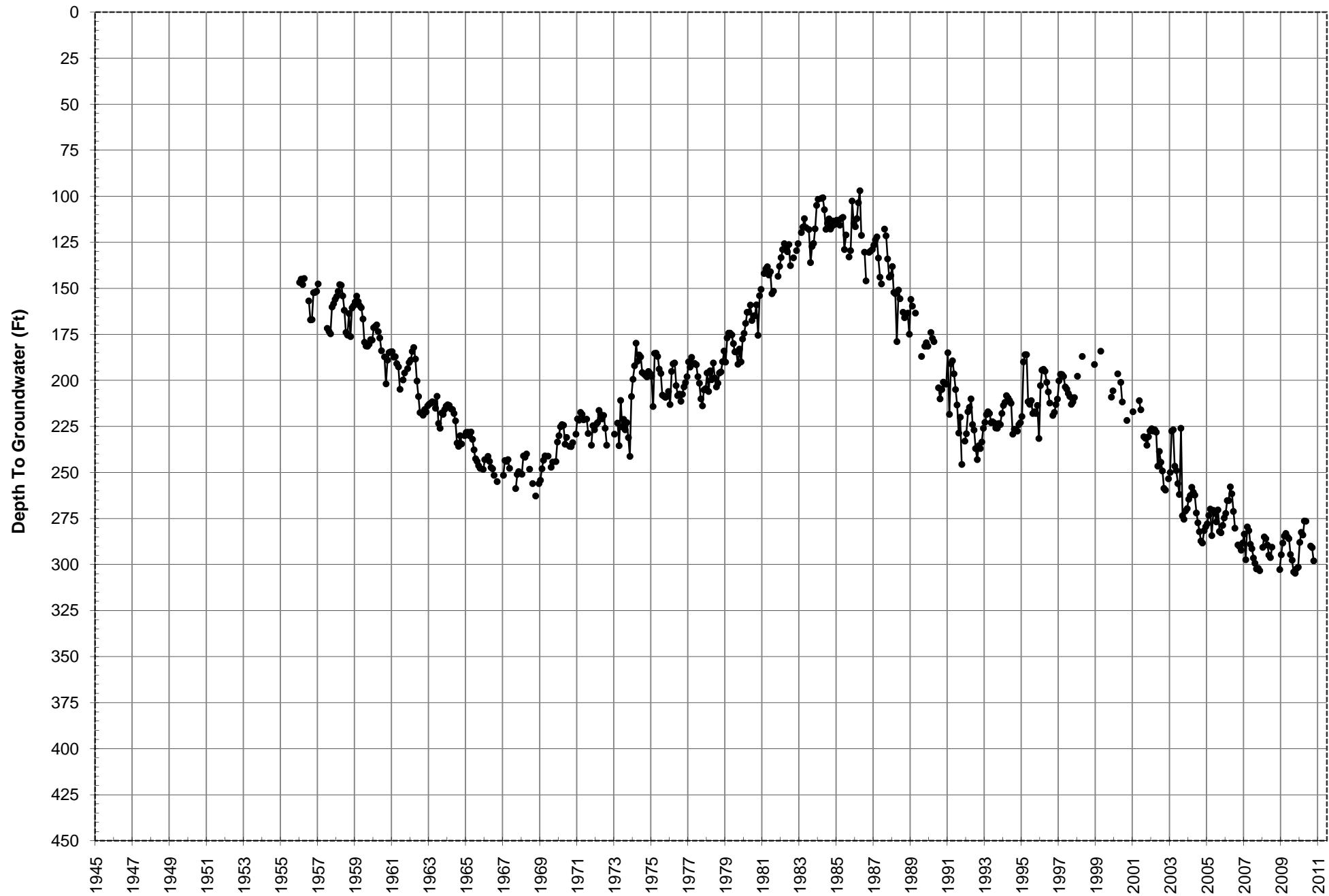
**City of San Bernardino**





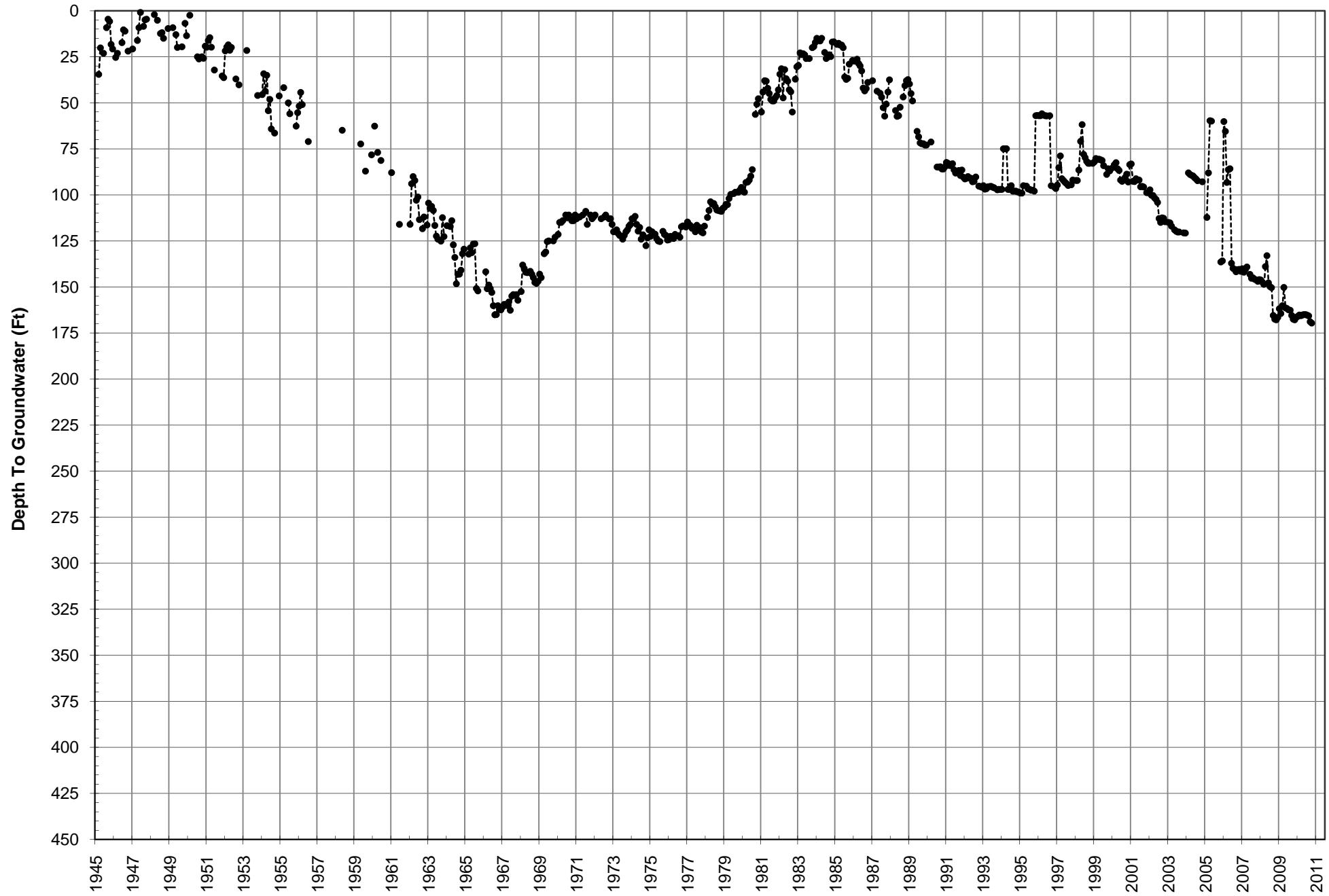
## 27th St. Index Well Hydrograph

City of San Bernardino



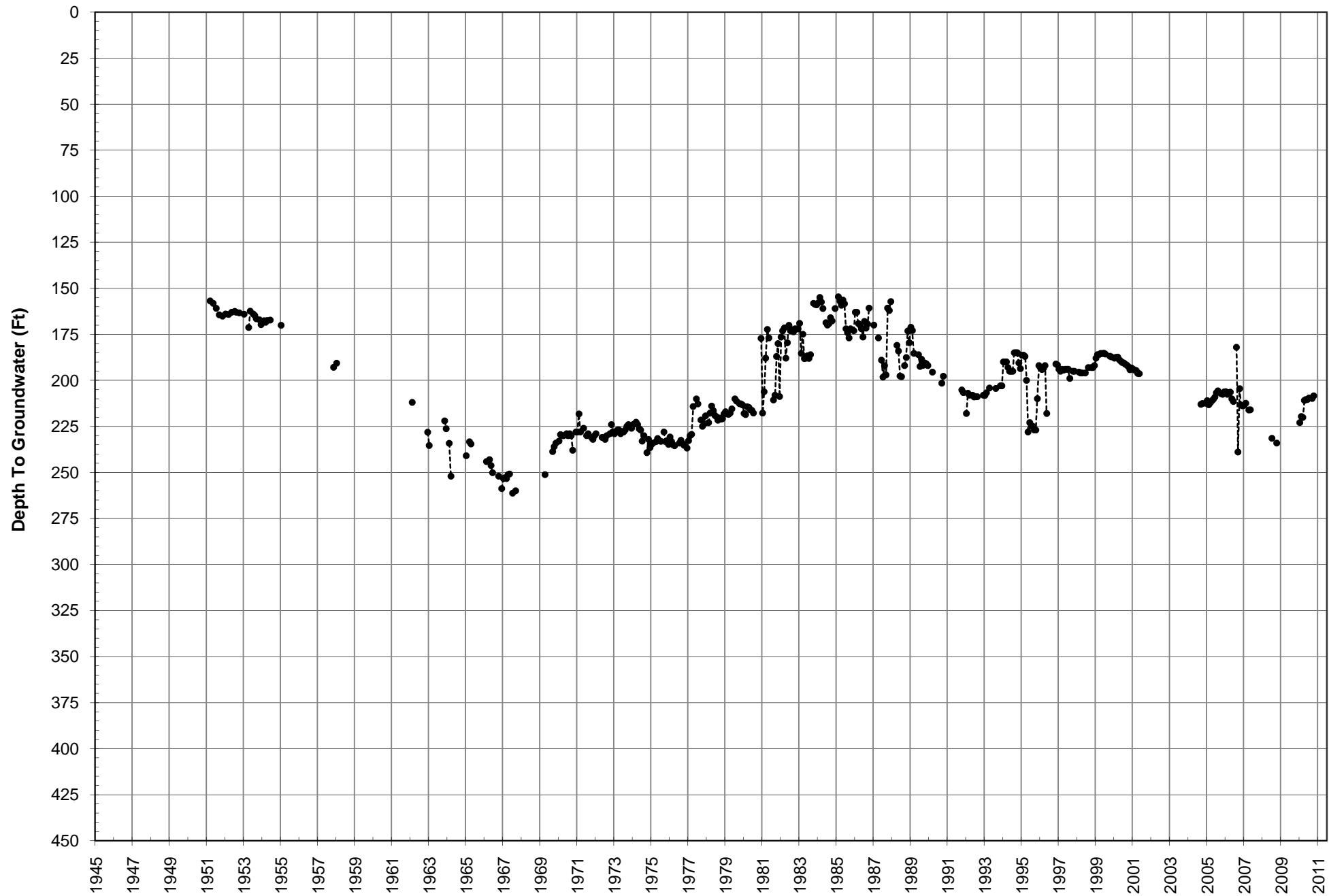
Plant No. 6  
Index Well Hydrograph

East Valley Water District



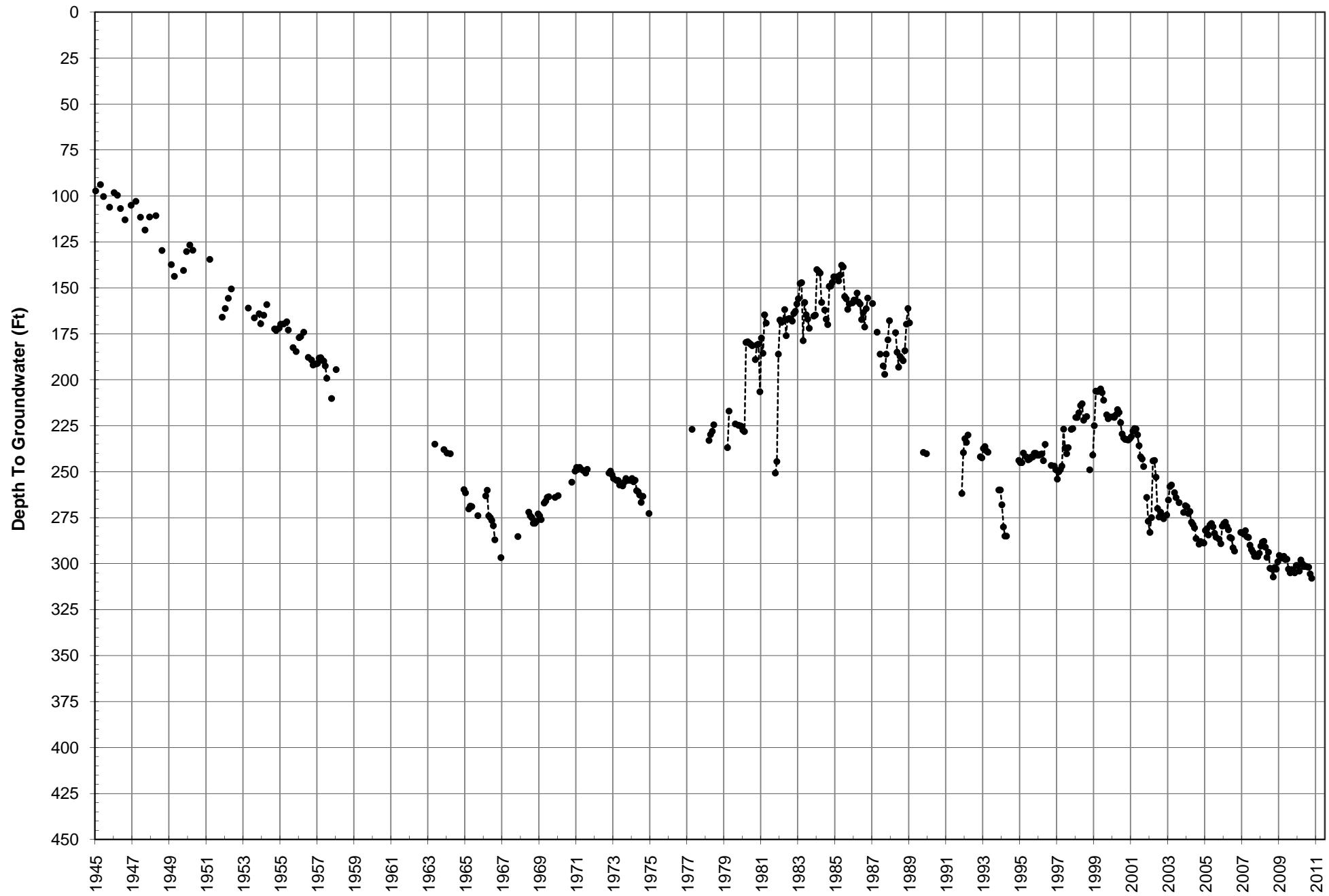
Plant No. 27  
Index Well Hydrograph

East Valley Water District



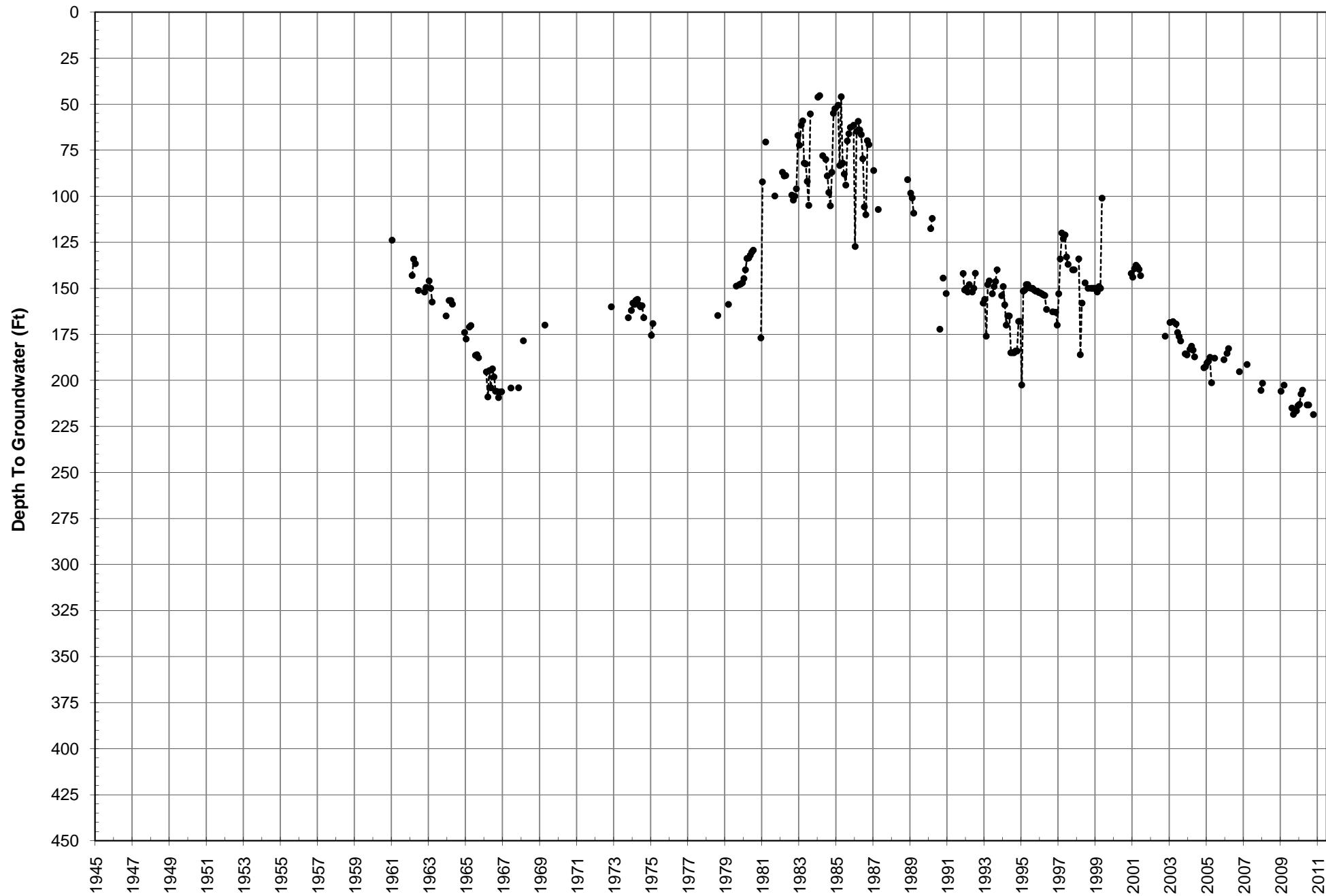
Plant No. 41  
Index Well Hydrograph

East Valley Water District



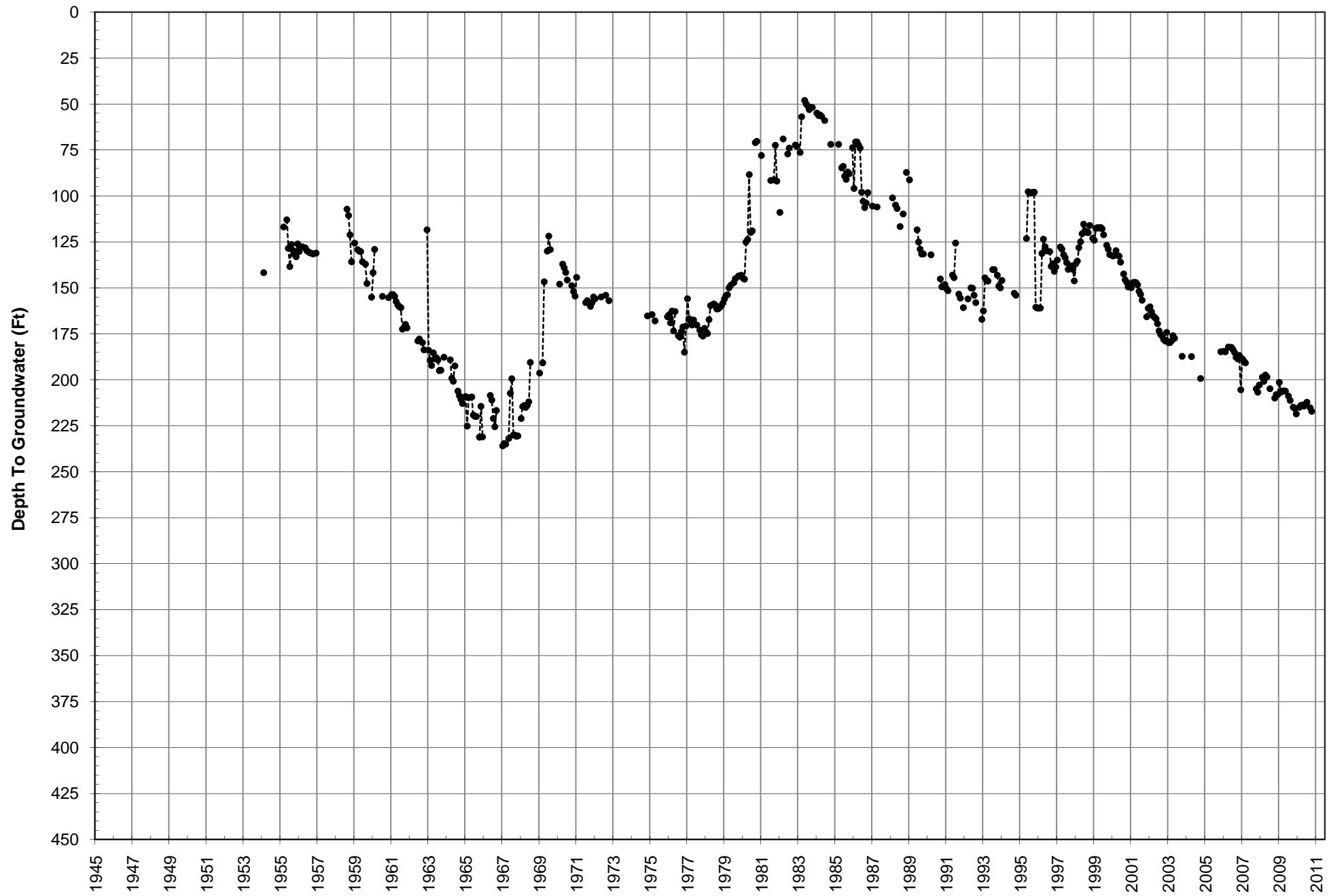
Plant No. 9A  
Index Well Hydrograph

East Valley Water District



## Tri City Index Well Hydrograph

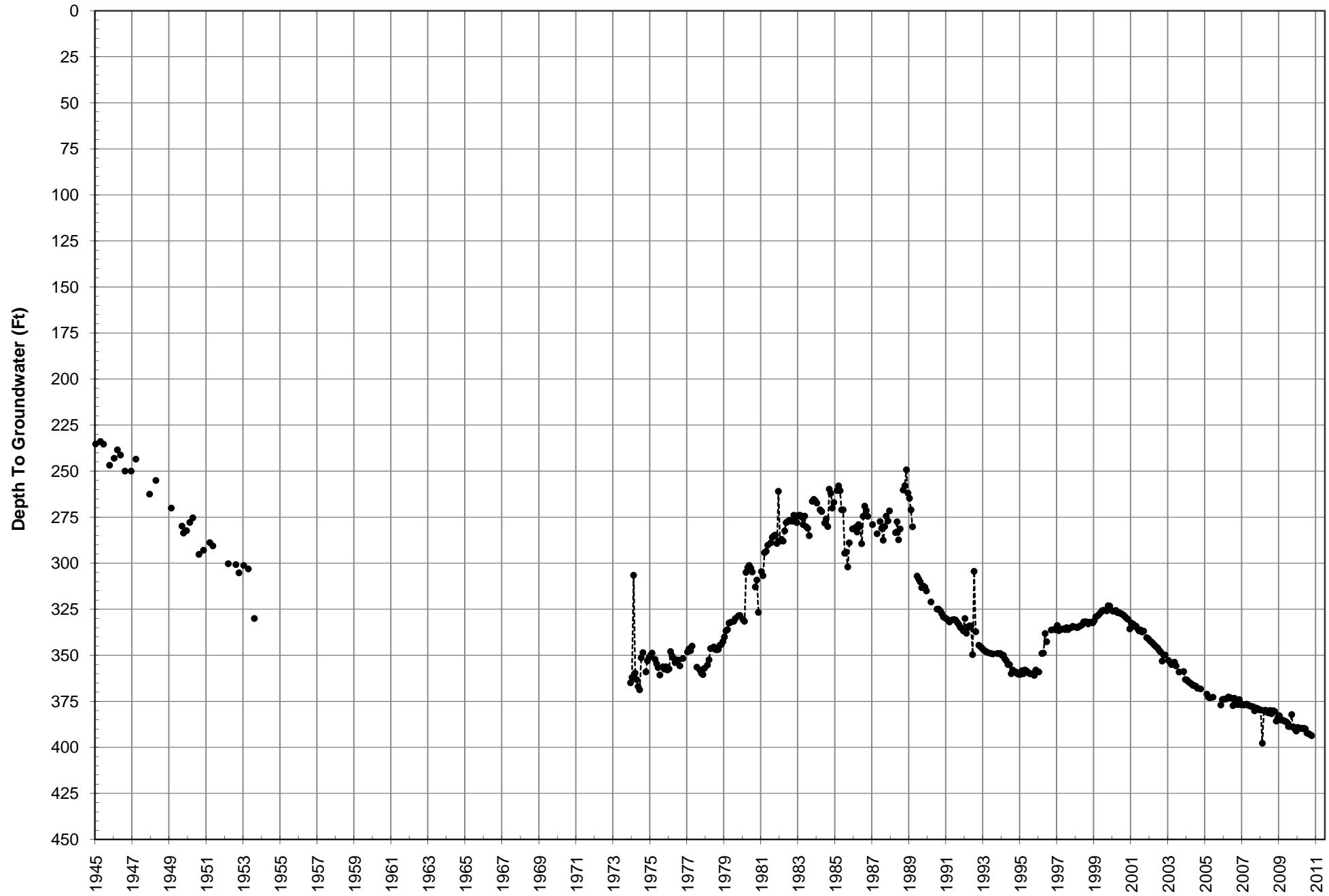
East Valley Water District





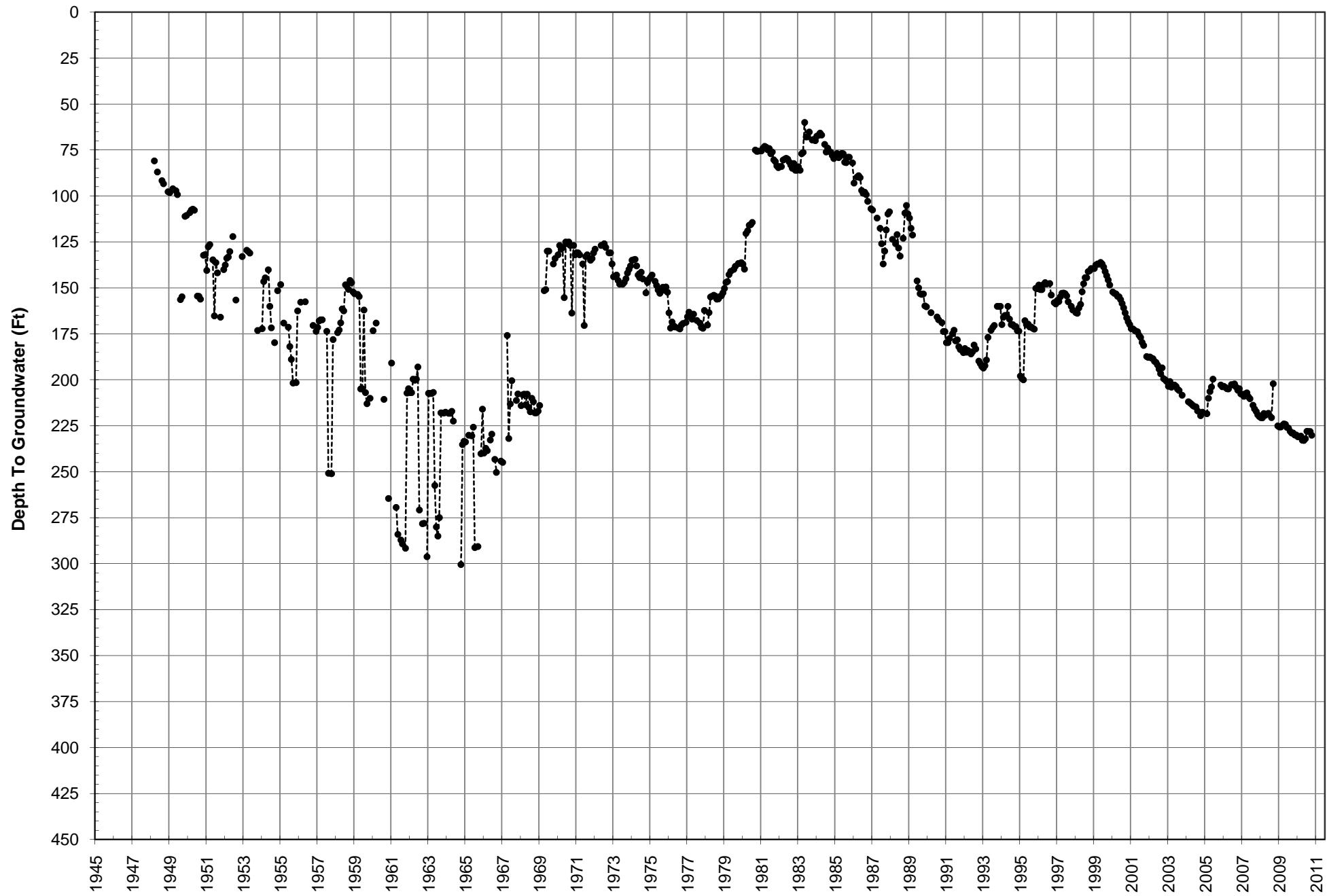
Plant No. 94  
Index Well Hydrograph

East Valley Water District



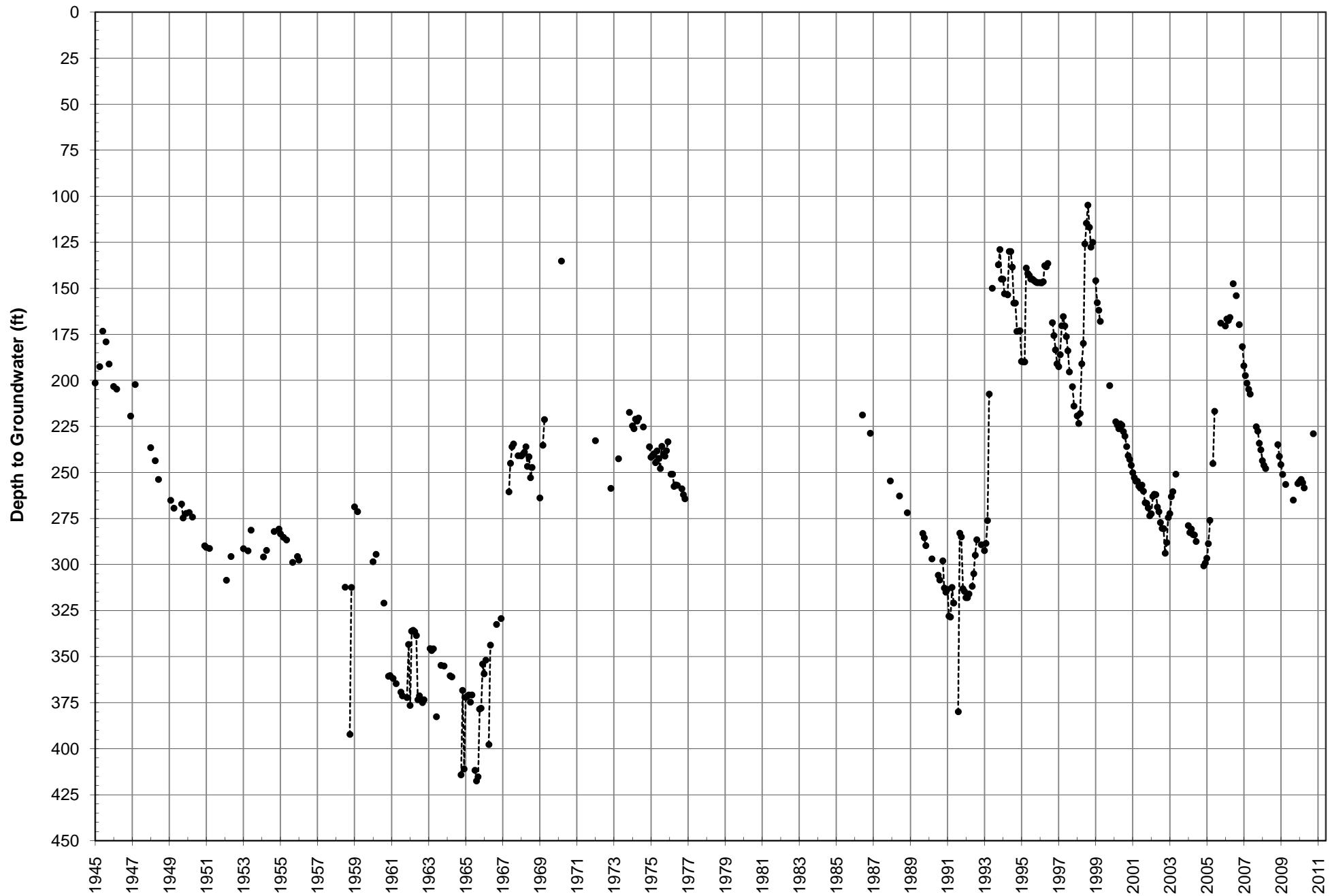
**Plant No. 102**  
**Index Well Hydrograph**

**East Valley Water District**



**Plant No. 142**  
**Index Well Hydrograph**

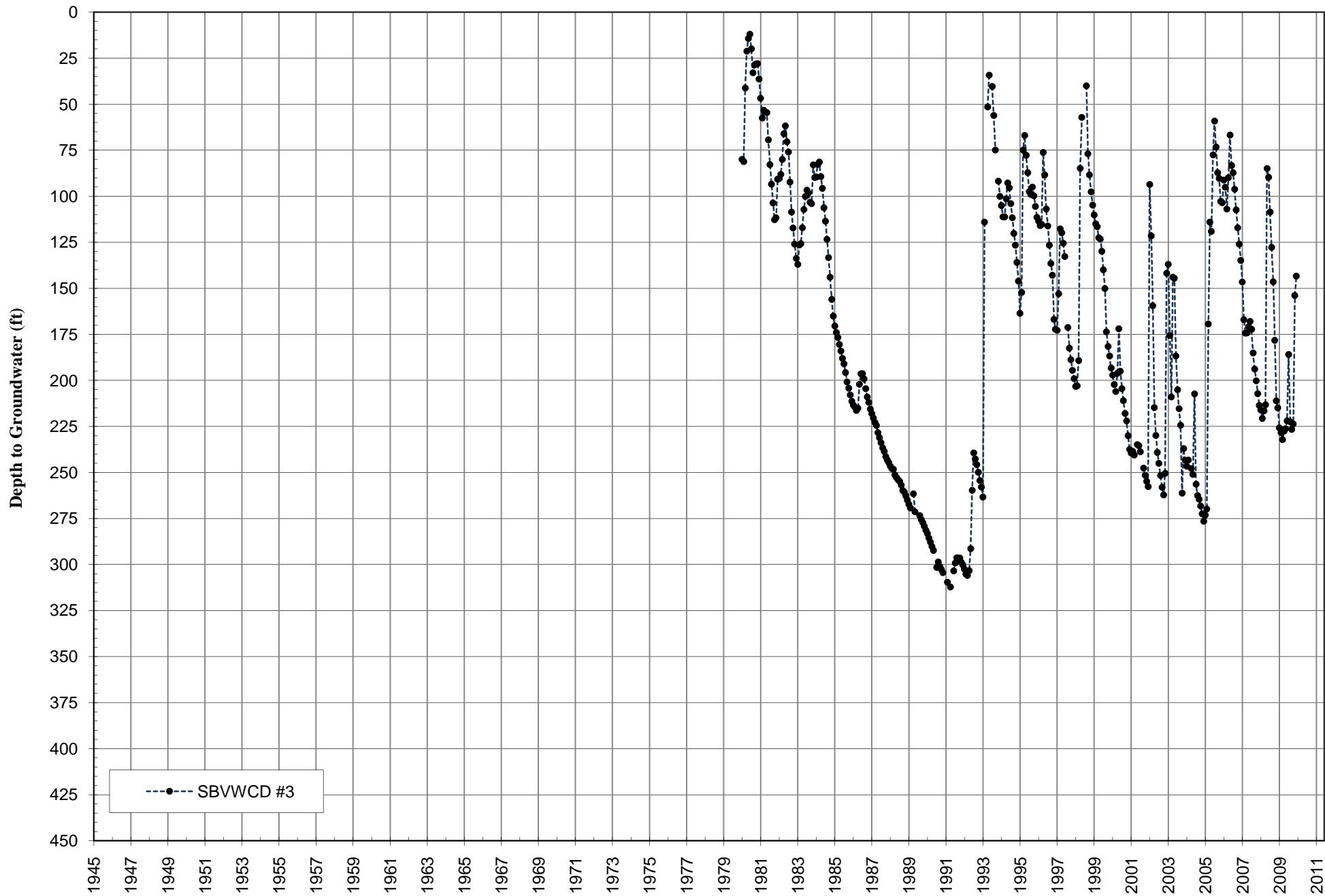
**East Valley Water District**





## 1S3W-12J1 #3 Index Well Hydrograph

SBVWCD #3

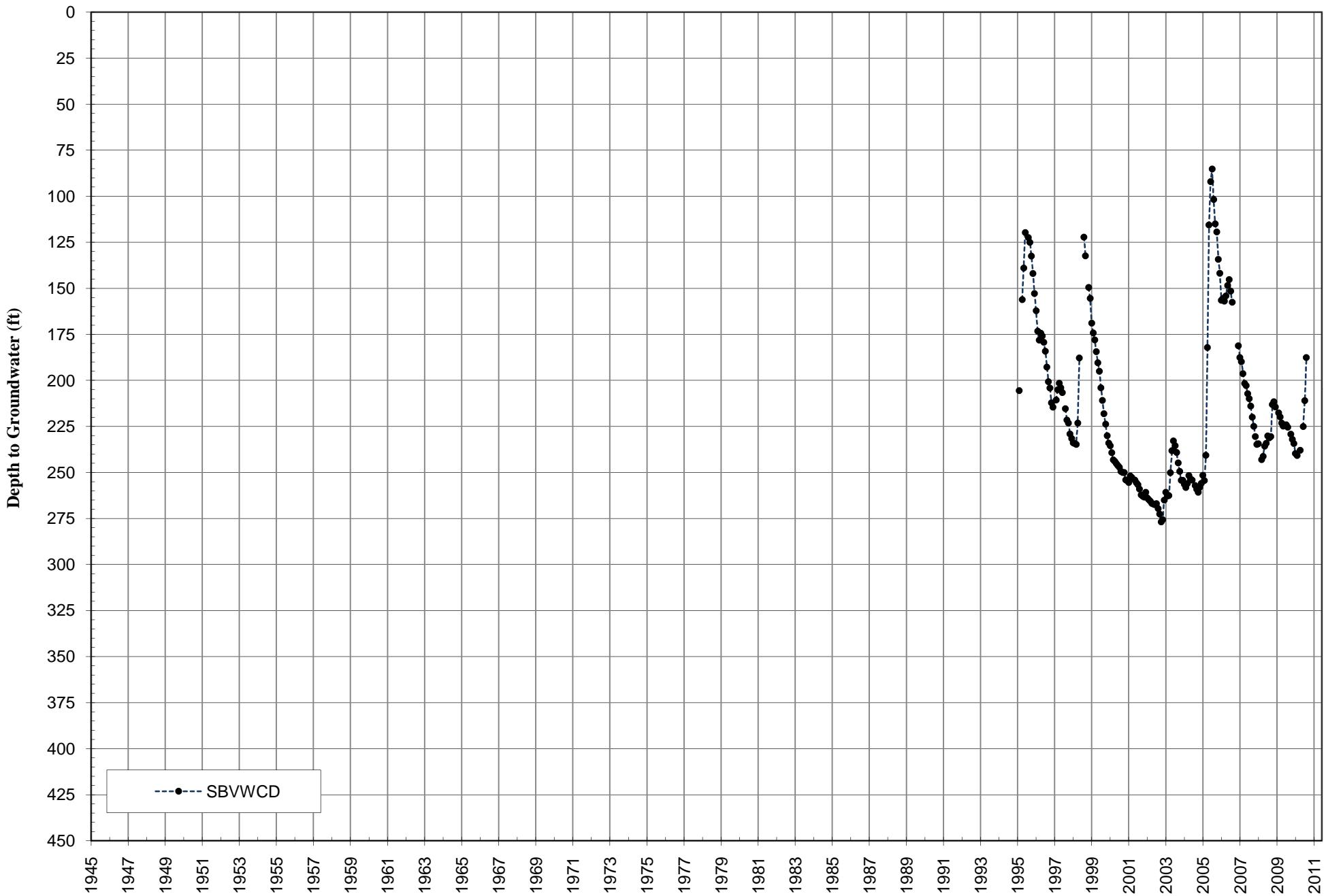




## MC-05

### Index Well Hydrograph

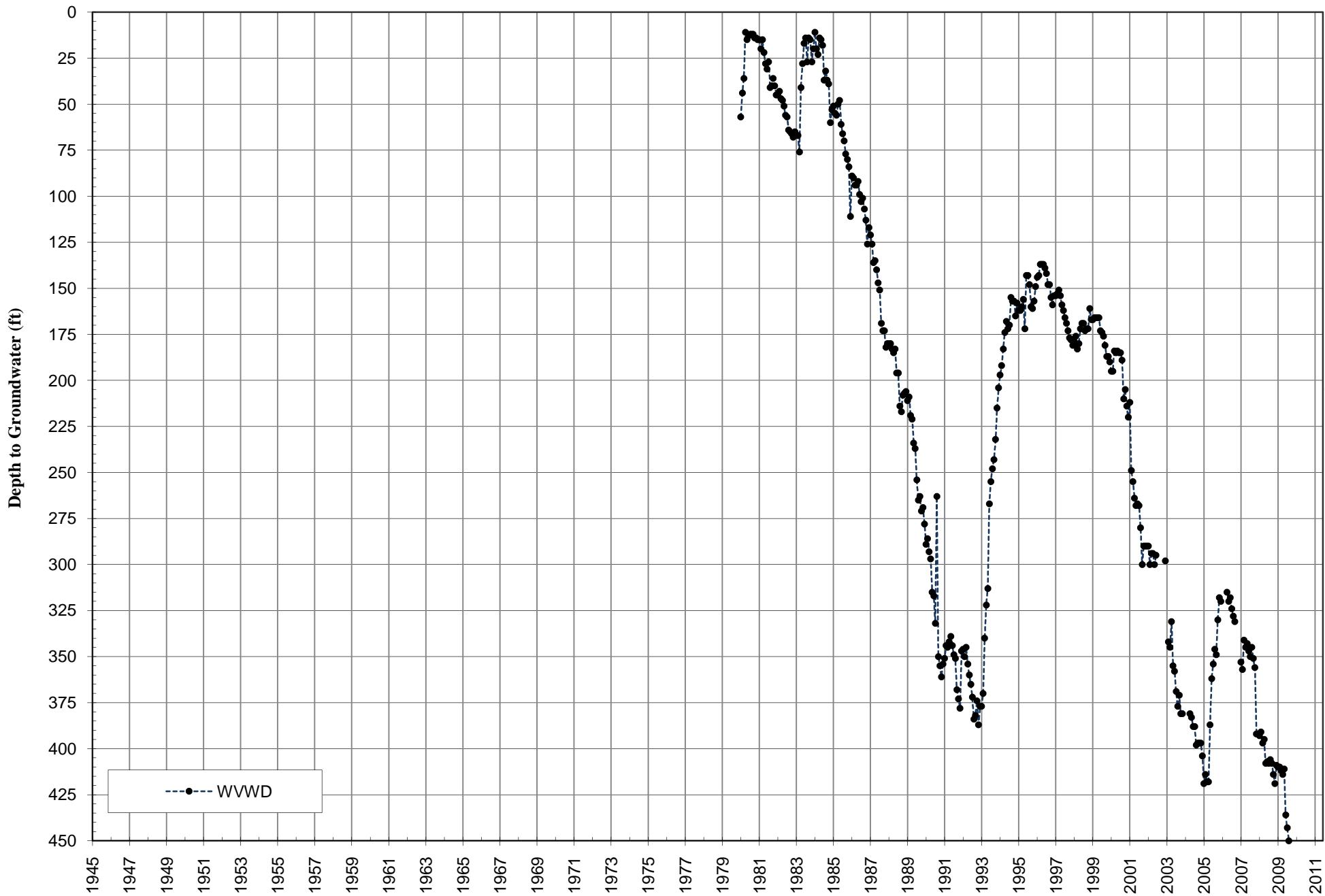
SBWCD





## No. 8 Index Well Hydrograph

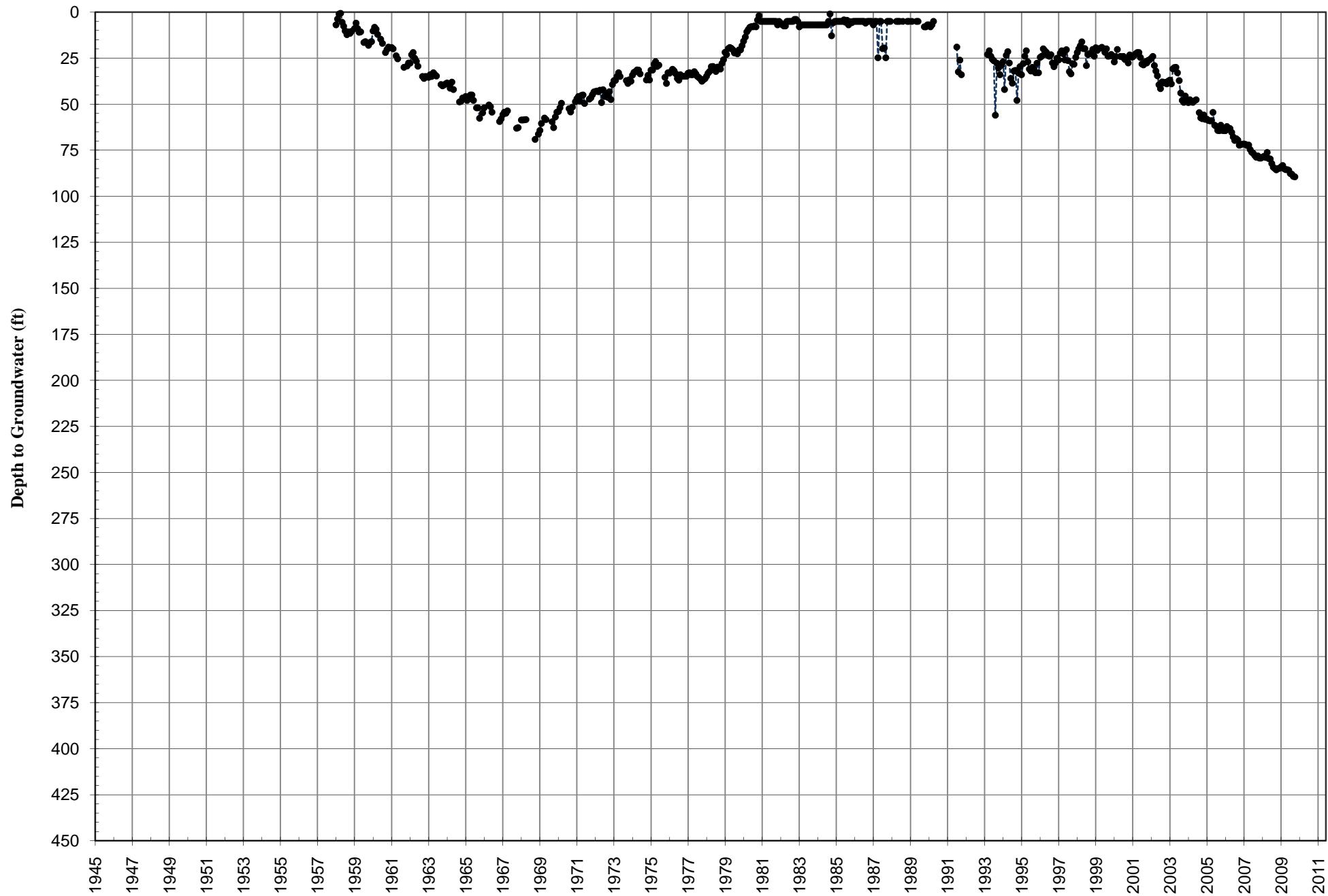
WVWD





## Mill & D Index Well Hydrograph

SBMWD



### Production Data for the Preceding Water Year

(July 2009 to June 2010)

WELL_NAME	Agency	RecordNum	JULY_2009	AUG_2009	SEP_2009	OCT_2009	NOV_2009	DEC_2009	JAN_2010	FEB_2010	MAR_2010	APR_2010	MAY_2010	JUNE_2010	JULY_2010	AUG_2010	SEP_2010	OCT_2010	NOV_2010	DEC_2010	SBVWCD Well	Subbasin Name	AGG_Non_AGG
Agate #1	City of Redlands	3601308	124.00	123.00	123.00	128.00	129.00		10.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.00	17.41	Yes	Bunker Hill II East of Mentone Fault North	Agricultural
Well #11	City of Redlands	3601292	12.98	8.98	8.88	6.05	2.92	0.00	2.78	3.19	4.78	6.20	10.23	12.13	12.96	12.34	12.25	7.31	6.18	3.41	Yes	Bunker Hill II East of Mentone Fault South	Agricultural
Well #16	City of Redlands	3601296	161.73	174.41	170.56	166.06	96.20	31.83	18.59	0.03	4.32	32.44	31.12	0.00	16.07	178.80	162.46	29.42	0.00	0.00	Yes	Bunker Hill II East of Mentone Fault South	Agricultural
Crafton	City of Redlands	3602654	141.00	143.00	141.00	145.00	142.00		0.52	0.26	0.17	0.00	1.91	164.14	0.00	97.55	69.49	0.18	7.28	0.00	Yes	Bunker Hill II East of Mentone Fault South	Agricultural
Mentone Acres #1	City of Redlands	3600748	110.27	64.73	61.68	17.34	0.00	83.22	0.00	0.05	3.07	6.82	9.19	9.06	8.82	7.63	8.71	3.77	1.68	0.00	Yes	Bunker Hill II West of Mentone Fault	Agricultural
Well #32	City of Redlands	3601298	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Bunker Hill II West of Mentone Fault	Agricultural
Well #41	City of Redlands	3601301	39.02	54.91	48.47	33.78	53.77	24.95	0.05	0.03	0.00	0.00	0.00	26.96	72.80	93.10	58.90	58.29	55.51	38.62	Yes	Bunker Hill II West of Mentone Fault	Agricultural
Well #30A	City of Redlands	3602031	44.74	0.00	49.25	31.53	14.67	15.70	16.26	9.86	17.96	23.88	34.93	40.90	47.86	47.03	46.78	30.49	25.80	17.81	Yes	Bunker Hill II West of Mentone Fault	Agricultural
New York St Well	City of Redlands	3602346	139.04	135.84	141.96	134.31	69.34	45.31	0.10	0.07	0.03	87.61	129.10	130.36	112.25	118.96	119.52	129.99	89.31	83.05	Yes	Bunker Hill II West of Mentone Fault	Agricultural
FV #5	Riverside Highland	3603514	0.00	0.20	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	Yes	Bunker Hill II West of Mentone Fault	Agricultural
Well 132	EVWD	3600376	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Yes	Pressure Zone North of Santa Ana Wash	Agricultural						
GAGE 26-1 WELL	Riverside-Gage	3600787	339.12	120.03	0.00	0.00	9.35	4.06	0.00	0.00	1.11	163.70	279.25	79.07	0.40	0.20	0.60	0.16	224.96	Yes	Pressure Zone North of Santa Ana Wash	Agricultural	
FW #18	Riverside Highland	3601533	0.00	0.00	0.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Pressure Zone North of Santa Ana Wash	Agricultural
GAGE 27-1 WELL	Riverside-Gage	3600788	288.42	285.25	317.09	305.63	287.17	297.10	276.74	200.14	220.26	294.88	306.85	289.43	297.02	248.66	227.70	231.44	21.36	Yes	Pressure Zone Santa Ana Wash	Agricultural	
GAGE 27-2 WELL	Riverside-Gage	3600789	246.10	253.24	238.32	250.71	160.77	1.15	0.00	0.00	0.72	152.09	237.60	249.97	247.27	239.91	227.98	210.56	170.11	Yes	Pressure Zone Santa Ana Wash	Agricultural	
GAGE 29-1 WELL	Riverside-Gage	3600790	199.44	198.13	104.75	191.22	117.47	23.78	0.00	0.00	1.55	78.23	207.89	207.69	209.64	191.90	182.52	116.10	0.00			Pressure Zone Santa Ana Wash	Agricultural
GAGE 51-1 WELL	Riverside-Gage	3600796	0.00	35.26	129.01	135.08	0.00	146.30	125.92	72.71	96.93	143.46	143.82	124.09	123.30	63.68	73.62	89.45	176.59	Yes	Pressure Zone Santa Ana Wash	Agricultural	
Station 59	Meeks & Dailey	3601887								0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Pressure Zone Santa Ana Wash	Agricultural
GAGE 66-1 WELL	Riverside-Gage	3602331	201.85	220.24	200.38	224.55	207.97	219.57	180.85	134.43	146.48	224.36	220.38	186.93	191.63	175.48	161.95	142.78	159.01	Yes	Pressure Zone Santa Ana Wash	Agricultural	
Station 91	Meeks & Dailey	3603215							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Pressure Zone Santa Ana Wash	Agricultural
CAJON CANYON WELL	City of San Bernardino	3600710	104.39	101.86	39.19	3.57	0.09	3.35	2.98	0.82	0.48	0.35	1.78	33.22	107.30	108.58	101.57	15.54	2.04	0.12		Bunker Hill I Northeast of 215 Freeway	Non-Agricultural
DEVIL CANYON 2 WELL	City of San Bernardino	3600711	84.36	182.37	167.43	167.13	117.44	36.86	8.26	4.93	55.08	146.99	154.75	186.09	197.22	196.64	182.04	155.55	134.48	102.80		Bunker Hill I Northeast of 215 Freeway	Non-Agricultural
DEVIL CANYON 1 WELL	City of San Bernardino	3600712	163.32	158.86	139.74	130.48	106.95	0.25	0.36	1.71	57.65	54.11	158.88	162.75	171.40	176.49	168.83	94.59	5.80	0.35		Bunker Hill I Northeast of 215 Freeway	Non-Agricultural
DEVIL CANYON 5 WELL	City of San Bernardino	3602844	54.77	62.15	56.02	55.72	15.15	0.15	0.08	1.14	1.28	1.94	28.84	33.25	55.46	63.24	60.70	34.83	0.84	0.18		Bunker Hill I Northeast of 215 Freeway	Non-Agricultural
CAJON 4 WELL	City of San Bernardino	3603792	224.67	217.43	204.74	169.28	29.90	0.32	0.21	4.18	10.97	3.35	173.00	234.28	234.02	236.00	224.56	120.02	41.45	0.50		Bunker Hill I Northeast of 215 Freeway	Non-Agricultural
DEVIL CANYON 4 WELL	City of San Bernardino	3602205	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.39	0.37	0.33	0.37	0.21	0.42	0.38	0.39	0.40	0.39	0.49		Bunker Hill I Northeast of 215 Freeway	Non-Agricultural
DEVIL CANYON 3 WELL	City of San Bernardino	3602206	0.00	0.00	0.00	0.00	0.00	0.00	0.49	2.86	2.98	1.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Bunker Hill I Northeast of 215 Freeway	Non-Agricultural
ELLENA BROS. WELL 2	City of San Bernardino	3602712	0.00	0.00	0.00	0.00	0.00	0.00														Bunker Hill I Northeast of 215 Freeway	Non-Agricultural
KENWOOD 1 WELL	City of San Bernardino	3603471	120.83	97.39	64.99	3.54	62.19	25.53	66.46	109.30	120.40	129.85	149.00	142.31	149.38	142.45	110.95	109.79	120.12	72.69		Bunker Hill I Northeast of 215 Freeway	Non-Agricultural
DEVIL CANYON 7 WELL	City of San Bernardino	3603579	2.67	4.40	4.01	3.68	3.12	3.37	2.92	5.80	8.77	8.92	7.14	5.41	6.24	5.14	4.68	4.67	4.30	3.27		Bunker Hill I Northeast of 215 Freeway	Non-Agricultural
DEVIL CANYON 6 WELL																							

### Production Data for the Preceding Water Year

(July 2009 to June 2010)

WELL_NAME	Agency	RecordNum	JULY_2009	AUG_2009	SEP_2009	OCT_2009	NOV_2009	DEC_2009	JAN_2010	FEB_2010	MAR_2010	APR_2010	MAY_2010	JUNE_2010	JULY_2010	AUG_2010	SEP_2010	OCT_2010	NOV_2010	DEC_2010	SBVWCD Well	Subbasin Name	AGG_Non_AGG
30TH ST WELL	City of San Bernardino	3600719	283.49	297.37	273.47	247.48	71.33	0.31	0.50	3.93	16.51	3.79	36.85	167.08	199.76	287.49	261.81	136.97	59.02	2.02		Bunker Hill II West of Mentone Fault	Non-Agricultural
27TH & ACACIA WELL	City of San Bernardino	3600720	51.02	30.19	25.55	13.73	8.61	0.37	0.61	1.97	1.83	3.14	4.06	25.28	38.10	39.01	27.17	8.58	0.42	1.48		Bunker Hill II West of Mentone Fault	Non-Agricultural
Mentone Acres #2	City of Redlands	3600749	265.00	249.00		235.00	230.00		62.54	31.54	42.77	0.00	17.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Maguet #2	City of Redlands	3601284	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Orange St. #5	City of Redlands	3601586	116.22	68.93	107.27	54.19	12.17	16.29	78.19	16.57	0.00	0.00	196.54	181.28	127.38	121.87	146.37	19.97	51.35	118.11	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 146	EVWD	3601639	10.84	13.00	17.42	24.78	0.00	0.00	0.01	3.97	27.84	49.19	49.86	39.71	50.22	35.14	19.94	16.45	15.74	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural	
Well 24A	EVWD	3601671	89.36	102.26	115.17	128.08	140.99	153.90	12.42	8.21	6.10	0.00	0.00	0.00	71.30	39.39	102.60	89.41	58.18	28.77	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 25A	EVWD	3601673	11.92	13.05	14.52	12.24	12.06	9.61	9.41	6.11	2.75	7.67	59.26	38.74	30.11	58.68	63.40	17.16	12.65	27.20	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 27	EVWD	3601675	37.36	37.33	36.89	33.12	13.75	11.72	1.55	9.54	3.13	0.00	0.00	15.82	84.03	96.22	0.87	0.00	0.00	0.00	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 40	EVWD	3601978	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 136-1	EVWD	3601987	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well #35	City of Redlands	3602032	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well #31A	City of Redlands	3602036	199.00	203.00	207.00	204.00	198.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Lee Well	City of Redlands	3602065	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
31ST ST & MT. VIEW WELL	City of San Bernardino	3602081	0.00	0.00	0.00	0.00	0.00	0.00	0.31	2.15	3.47	1.83	5.90	38.36	34.52	28.71	23.18	0.25	1.80	0.34		Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 41	EVWD	3602113	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well #37	City of Redlands	3602211	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 39	EVWD	3602274	141.27	138.06	117.01	86.66	43.47	26.78	50.57	40.83	47.43	57.28	108.05	108.39	124.66	132.51	123.40	75.14	36.68	32.41	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 24B	EVWD	3602337	155.13	98.49	172.33	108.70	61.67	41.26	51.53	33.54	43.64	74.29	30.11	13.58	93.66	57.51	0.00	0.19			Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 40A	EVWD	3602338	0.00	0.00	0.00	0.00	0.00	0.00	77.11	102.05	107.74	25.27	130.09	129.45	156.99	117.71	88.59	21.42	24.58	27.91	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 107	EVWD	3602370	84.01	86.99	89.61	88.63	113.92	89.37	98.39	101.15	114.87	117.12	102.51	110.92	114.70	115.63	83.31	51.07	37.68	39.88	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 136-2	EVWD	3602560	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Airport #1	City of Redlands	3602895	78.60	206.87	227.64	51.45	18.28	79.98	116.74	110.06	108.96	200.19	176.28	158.90	124.66	166.39	62.40	15.49	57.02	128.81	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Madeira	City of Redlands	3602896	103.93	93.62	34.64	23.09	9.71	16.67	47.43	26.93	63.91	87.37	106.04	25.32	15.52	54.64	43.64	0.00	11.36	73.05	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
LC #10	Riverside Highland	3603470	146.00	156.50	142.70	174.20	127.20	29.00	0.60	0.00	16.70	153.20	139.50	88.80	104.30	43.10	0.00	82.90	64.90			Bunker Hill II West of Mentone Fault	Non-Agricultural
40TH & VALENCIA WELL	City of San Bernardino	3603472	0.09	2.42	8.65	6.81	2.55	0.04	0.25	1.07	3.13	5.43	3.52	12.06	14.89	24.93	47.13	44.16	57.62	2.73		Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 143	EVWD	3603583	131.85	118.11	116.16	81.71	73.57	39.57	26.95	46.47	79.38	112.99	108.72	107.05	114.72	114.21	97.86	70.91	55.38	44.02	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Well #38	City of Redlands	3603655	206.15	204.96	201.85	127.86	65.55	87.41	199.96	47.76	102.94	178.81	208.02	194.03	202.96	228.21	185.85	89.86	128.95	123.03	Yes	Bunker Hill II West of Mentone Fault	Non-Agricultural
Church St.	City of Redlands	3603656	99.01	3.34	19.08	10.97	0.00	0.00	0.00	0.00	0.00	0.00	56.01	0.00	0.00	8.20	95.77	11.06	0.00	33.15		Bunker Hill II West of Mentone Fault	Non-Agricultural
Well 147	EVWD	3603734	262.33	250.06	250.31	160.07	111.35	80.90	83.03	6.02	46.03	12.80	154.22	251.64	271.79	294.67	234.63	149.99</td					

### Production Data for the Preceding Water Year

(July 2009 to June 2010)

WELL_NAME	Agency	RecordNum	JULY_2009	AUG_2009	SEP_2009	OCT_2009	NOV_2009	DEC_2009	JAN_2010	FEB_2010	MAR_2010	APR_2010	MAY_2010	JUNE_2010	JULY_2010	AUG_2010	SEP_2010	OCT_2010	NOV_2010	DEC_2010	SBVWCD Well	Subbasin Name	AGG_Non_AGG	
Well No 9	WVWD	3601002	0.00	0.00	0.00	0.00	0.00	0.00															Lytle Basin Southeast of Barrier J	Non-Agricultural
Lytle Basin Div	WVWD	3601725	0.00	0.00	0.00	0.00	0.00	0.00															Lytle Basin Southeast of Barrier J	Non-Agricultural
MALLORY NO.3 WELL	City of San Bernardino	3601845	0.00	0.00	0.00	0.00	0.00	0.00	25.93	1.28	20.06	37.97	34.58	31.10	28.45	16.19	0.00	4.68	78.17	77.96		Lytle Basin Southeast of Barrier J	Non-Agricultural	
Well No 2	WVWD	3601944	256.62	216.54	207.85	197.65	166.68	40.33	141.63	44.73	53.80	114.53	125.21	87.79	174.24	157.69	208.00	151.14	76.28	191.32		Lytle Basin Southeast of Barrier J	Non-Agricultural	
Well No 34	WVWD	3602897	0.00	0.00	0.00	0.00	0.00	0.00															Lytle Basin Southeast of Barrier J	Non-Agricultural
LYTLE CREEK 2 WELL	City of San Bernardino	3603027	53.70	52.29	49.98	52.43	51.01	53.10	34.29	0.77	6.06	55.02	54.94	49.15	50.51	51.12	50.14	53.05	46.97	48.32		Lytle Basin Southeast of Barrier J	Non-Agricultural	
Well No 35	WVWD	3603054	0.00	0.00	0.00	0.00	0.00	0.00															Lytle Basin Southeast of Barrier J	Non-Agricultural
Well No 36	WVWD	3603055	0.00	0.00	0.00	0.00	0.00	0.00															Lytle Basin Southeast of Barrier J	Non-Agricultural
Well No 8A	WVWD	3603778	192.87	176.85	143.20	120.27	104.38	84.34	115.82	30.25	104.24	98.16	48.59	115.95	128.83	26.64	21.30	0.52	1.26	0.81		Lytle Basin Southeast of Barrier J	Non-Agricultural	
Well 54	WVWD	3604014	124.95	133.51	123.50	117.53	107.09	97.12	132.19	106.81	121.16	124.56	125.09	76.06	310.18	118.06	113.10	312.64	83.12	116.50		Lytle Basin Southeast of Barrier J	Non-Agricultural	
Well 4A	WVWD	VVWD4A	1.64	217.84	178.47	127.71	97.11	18.50	21.44	37.92	62.42	51.08	111.01	179.66	175.73	99.88	22.72	0.84		2.72		Lytle Basin Southeast of Barrier J	Non-Agricultural	
17TH & SIERRA WAY 2 WELL	City of San Bernardino	3600725	0.12	0.01	0.00	0.08	0.06	41.96	115.86	23.99	62.21	1.60	13.95	4.80	12.73	0.43	0.27	0.30	0.45			Pressure Zone North of Santa Ana Wash	Non-Agricultural	
16TH & SIERRA WAY WELL	City of San Bernardino	3600726	213.62	206.57	200.72	210.51	206.79	201.45	132.74	0.51	115.18	104.26	216.87	183.89	198.44	230.94	229.58	213.97	206.55	169.28		Pressure Zone North of Santa Ana Wash	Non-Agricultural	
Well 9A	EVWD	3601660	95.75	90.88	79.24	46.19	56.81	36.35	36.56	18.61	35.51	56.76	93.79	92.14	86.83	148.25	159.46	63.90	68.13	73.94	Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural	
Well 12	EVWD	3601663	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural							
Well 12A	EVWD	3602034	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.08	Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural	
7TH STREET WELL	City of San Bernardino	3602265	0.00	0.00	0.00	0.00	0.00	0.00	0.52	3.95	3.70	2.68	8.98	8.60	11.69	16.37	12.20	7.06	2.60	0.35		Pressure Zone North of Santa Ana Wash	Non-Agricultural	
ANTIL 6 WELL	City of San Bernardino	3602422	0.00	0.00	0.00	0.00	0.00	0.00	1.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural	
Well 11A	EVWD	3602563	229.87	252.59	272.69	247.13	190.25	67.16	56.80	54.59	81.29	152.86	197.41	241.48	268.04	161.29	202.42	126.04	37.18	49.20	Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural	
Well 28A	EVWD	3602564	207.69	202.71	193.30	204.22	198.79	212.78	219.78	204.85	225.37	211.23	214.38	202.82	206.29	194.24	182.89	197.53	162.09	207.94	Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural	
10th & 1 STREET WELL	City of San Bernardino	3603207	272.83	268.27	253.24	168.41	58.54	1.08	0.98	4.46	3.48	40.03	183.25	230.74	256.84	266.13	261.96	227.10	204.19	117.46		Pressure Zone North of Santa Ana Wash	Non-Agricultural	
Well 141	EVWD	3603247	106.91	103.56	51.39	43.95	53.53	31.18	43.73	25.91	42.47	72.84	109.58	114.32	100.51	156.46	129.17	92.57	86.24	82.72	Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural	
McFARLAND JOHNSON	City of San Bernardino	3600222	0.00	0.00	0.00	0.00	0.00	0.00														Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural
GILBERT ST WELL.	City of San Bernardino	3600729	5.86	0.00	0.00	0.00	0.00	0.00	29.89	1.58	0.00	0.00	8.24	0.00	0.49	0.00	0.00	0.85	76.46	0.00		Pressure Zone North of Santa Ana Wash	Non-Agricultural	
PERRIS HILL 4 WELL	City of San Bernardino	3601117	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural	
STILES WELL	Riverside-Gage	3601463	63.10	93.72	88.23	40.12	60.87	0.19	6.00	0.00	0.00	0.00	0.00	0.00	0.00	18.11	86.16	58.35	56.19		Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural	
GARNER NO.4 WELL	Riverside-Gage	3601467	37.39	31.66	0.00	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	21.60	32.40	26.99	20.09			Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural	
GARNER NO.5 WELL	Riverside-Gage	3601468	169.96	191.24	169.68	103.81	154.41	61.26	30.14	0.00	0.00	0.00	0.00	81.69	196.15	42.42	0.00	0.00	0.00	0.00	Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural	
SCHEUER WELL	Riverside-Gage	3601489	346.66	322.90	392.98	236.09	0.00	1.91	38.90	0.00	0.00	0.00	0.00	0.00	224.12	401.94	388.65	216.44	36.34		Yes	Pressure Zone North of Santa Ana Wash	Non-Agricultural	
RN #17	Riverside Highland	3601532	3.80	1.20	0.10	0.10	0.20	0.10	0.20	0.10	0.10	0.10	0.10	8.80	3.00	10.40	32.40	13.40	2.60	0.10		Pressure Zone North of Santa Ana Wash	Non-Agricultural	
LC #1	Riverside Highland	3601535	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Pressure Zone North of Santa Ana Wash	Non-Agricultural	
FLUME #6 WELL	Riverside-Gage	3602423	111.8																					

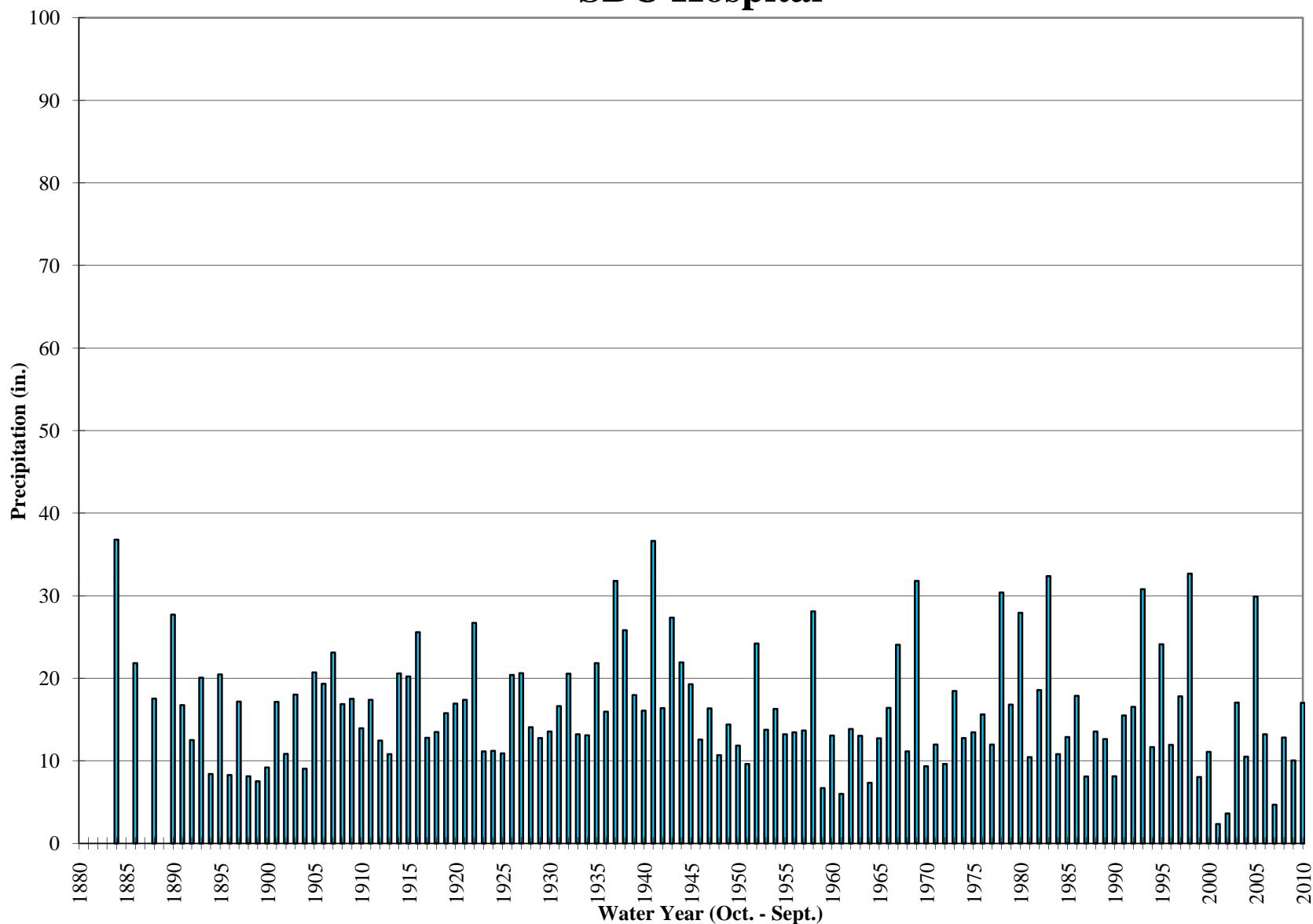
### Production Data for the Preceding Water Year

(July 2009 to June 2010)

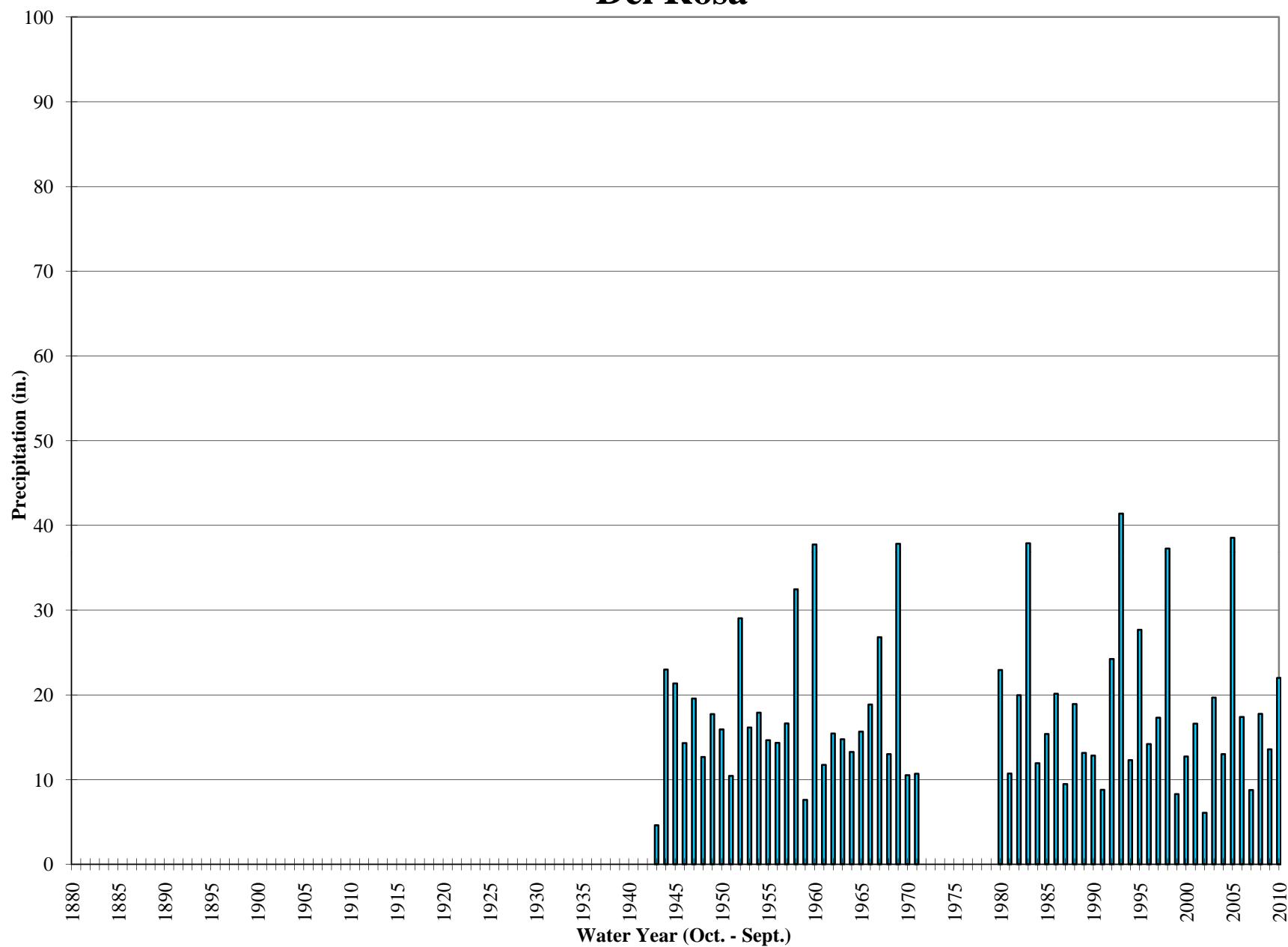
WELL_NAME	Agency	RecordNum	JULY_2009	AUG_2009	SEP_2009	OCT_2009	NOV_2009	DEC_2009	JAN_2010	FEB_2010	MAR_2010	APR_2010	MAY_2010	JUNE_2010	JULY_2010	AUG_2010	SEP_2010	OCT_2010	NOV_2010	DEC_2010	SBWCD Well	Subbasin Name	AGG_Non_AGG	
MILL & D WELL	City of San Bernardino	3600737	30.87	31.24	29.35	28.68	32.34	34.47	23.64	3.15	23.37	23.58	45.68	43.12	42.24	41.35	39.65	40.88	38.75	31.66		Pressure Zone Santa Ana Wash	Non-Agricultural	
GAGE 29-2 WELL	Riverside-Gage	3600791	326.29	321.38	303.86	312.07	0.00	0.16	111.80	0.00	220.98	277.81	82.69	352.86	359.43	350.52	333.85	310.03	340.22		Yes	Pressure Zone Santa Ana Wash	Non-Agricultural	
GAGE 29-3 WELL	Riverside-Gage	3600792	2.76	194.60	290.00	284.56	284.81	293.74	239.15	101.66	0.00	0.00	0.00	96.45	275.74	266.24	250.09	235.81	214.97			Pressure Zone Santa Ana Wash	Non-Agricultural	
GAGE 30-1 WELL	Riverside-Gage	3600793	0.00	0.12	0.00	0.00	4.22	0.60	0.00	0.00	0.16	0.00	61.57	75.41	0.00	0.28	0.32	0.08	0.20			Pressure Zone Santa Ana Wash	Non-Agricultural	
GAGE 31-1 WELL	Riverside-Gage	3600794	222.17	196.32	59.34	20.54	5.49	1.19	0.00	0.00	0.00	18.77	209.60	184.98	125.60	95.77	18.65	0.20	0.00			Pressure Zone Santa Ana Wash	Non-Agricultural	
GAGE 46-1R WELL	Riverside-Gage	3600795	234.24	236.61	196.68	184.78	153.83	0.00	0.00	0.00	0.00	0.00	37.27	267.27	280.84	283.42	255.86	208.89	273.00			Pressure Zone Santa Ana Wash	Non-Agricultural	
GAGE 56-1 WELL	Riverside-Gage	3600797	164.92	145.89	142.81	150.32	102.34	0.84	0.00	0.00	1.03	58.31	173.29	150.38	157.30	136.94	113.23	111.17	0.00			Pressure Zone Santa Ana Wash	Non-Agricultural	
RAUB NO.2 WELL	Riverside-Gage	3601219	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Pressure Zone Santa Ana Wash	Non-Agricultural	
RAUB NO.3 WELL	Riverside-Gage	3601239	28.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Pressure Zone Santa Ana Wash	Non-Agricultural	
WARREN NO.1 WELL	Riverside-Gage	3601240	30.45	26.20	24.83	1.86	0.00	0.03	19.30	26.41	0.00	0.00	8.85	0.01	96.50	210.29	125.34	63.72	30.16			Pressure Zone Santa Ana Wash	Non-Agricultural	
WARREN NO.4 WELL	Riverside-Gage	3601243	27.64	27.14	27.45	5.44	0.00	0.52	0.72	20.98	13.67	18.18	0.00	0.13	57.53	158.06	91.63	56.62	24.71	Yes		Pressure Zone Santa Ana Wash	Non-Agricultural	
THORNE NO.12	Riverside-Gage	3601470	30.02	6.86	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	34.25	104.66	82.50	18.66	7.40			Pressure Zone Santa Ana Wash	Non-Agricultural	
FW #2	Riverside Highland	3601523	0.00	0.00	0.10	0.10	0.10	0.20	0.10	0.10	0.10	0.10	0.10	0.20	0.10	0.10	0.10	0.10	0.10	0.10		Pressure Zone Santa Ana Wash	Non-Agricultural	
Hunt 10	Riverside-Gage	3602772	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Pressure Zone Santa Ana Wash	Non-Agricultural	
Hunt 11	Riverside-Gage	3602773	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Yes	Pressure Zone Santa Ana Wash	Non-Agricultural	
Hunt 6	Riverside-Gage	3602778	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.78	12.53	6.81	0.00	0.00	0.00	Yes	Pressure Zone Santa Ana Wash	Non-Agricultural	
GAGE 92-3 WELL	Riverside-Gage	3603556	237.04	235.90	221.44	243.19	238.84	114.48	9.55	4.34	170.47	280.28	272.25	239.23	241.70	221.73	212.63	223.40	223.44			Pressure Zone Santa Ana Wash	Non-Agricultural	
GAGE 92-2 WELL	Riverside-Gage	3603557	324.15	323.28	308.65	325.77	305.04	95.95	0.00	0.00	189.28	329.16	333.06	310.94	312.50	307.36	266.40	292.09	309.63			Pressure Zone Santa Ana Wash	Non-Agricultural	
GAGE 92-1 WELL	Riverside-Gage	3603558	277.53	283.39	209.16	114.69	284.53	314.95	145.05	98.72	233.07	299.73	304.14	190.55	0.36	245.44	259.24	262.18	278.53			Pressure Zone Santa Ana Wash	Non-Agricultural	
IVDA WELL 11	City of San Bernardino	3603649	9.53	5.38	7.70	6.19	5.13	5.82	7.84	5.04	5.42	4.86	4.28	4.29	4.19	4.66	4.73	4.52	5.06	5.77		Pressure Zone Santa Ana Wash	Non-Agricultural	
GAGE 98-1 WELL	Riverside-Gage	3603728	403.03	403.22	386.65	380.11	378.77	68.38	0.00	0.00	0.65	280.00	414.77	393.24	395.91	394.00	377.90	368.14	379.22			Pressure Zone Santa Ana Wash	Non-Agricultural	
RN #6	Riverside Highland	3603738	213.80	211.90	195.60	164.60	156.00	155.10	182.40	139.30	187.90	208.50	187.10	185.70	137.80	141.20	140.20	59.60	58.00	9.10		Pressure Zone Santa Ana Wash	Non-Agricultural	
HOME GARDEN DELIVER	Riverside-Gage	HomeGarden	41.39	40.91	38.53	33.61	30.62	22.52	22.67	18.18	25.37	26.47	32.65	38.20	41.24	40.87	46.12	29.71	27.44			Pressure Zone Santa Ana Wash	Non-Agricultural	
M&D 59	Riverside-Gage	MD59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Pressure Zone Santa Ana Wash	Non-Agricultural	
SB Muni Well	City of Redlands	SBWell	133.24	234.13	73.68	0.08	0.00	0.00	0.00	0.00	0.00	0.00	191.92	57.88	0.00	35.02	0.00	5.63	0.00	0.00	0.00		Pressure Zone Santa Ana Wash	Non-Agricultural
RECYCLED WATER	Riverside-Gage		19.34	16.00	12.73	8.05	7.54	1.99	2.20	0.11	4.43	5.86	15.42	15.62	18.68	13.13	7.11	6.74				Pressure Zone Santa Ana Wash	Non-Agricultural	
WARREN NO.3 WELL	Riverside-Gage		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Pressure Zone Santa Ana Wash	Non-Agricultural	
WMWD WARMINGTON-CAN DEL	Riverside-Gage		55.25	45.53	52.21	8.22	11.79	17.24	13.84	0.00	0.00	2.90	0.48	1.29	0.28	1.08	5.78	21.24	7.09			Pressure Zone Santa Ana Wash	Non-Agricultural	
IITH ST WELL IRR	Riverside-Gage	11thstreet	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Non-Agricultural		
JURUPA NO.7 WELL	Riverside-Gage	Jurupa7	154.96	114.93	124.11	117.32	61.22	37.84	0.52	17.41	89.12	119.13	110.15	0.00	81.37	111.23	75.28	113.32	109.65				Non-Agricultural	
OLIVEWOOD 1 WELL	Riverside-Gage																							

# Historic Annual Precipitation

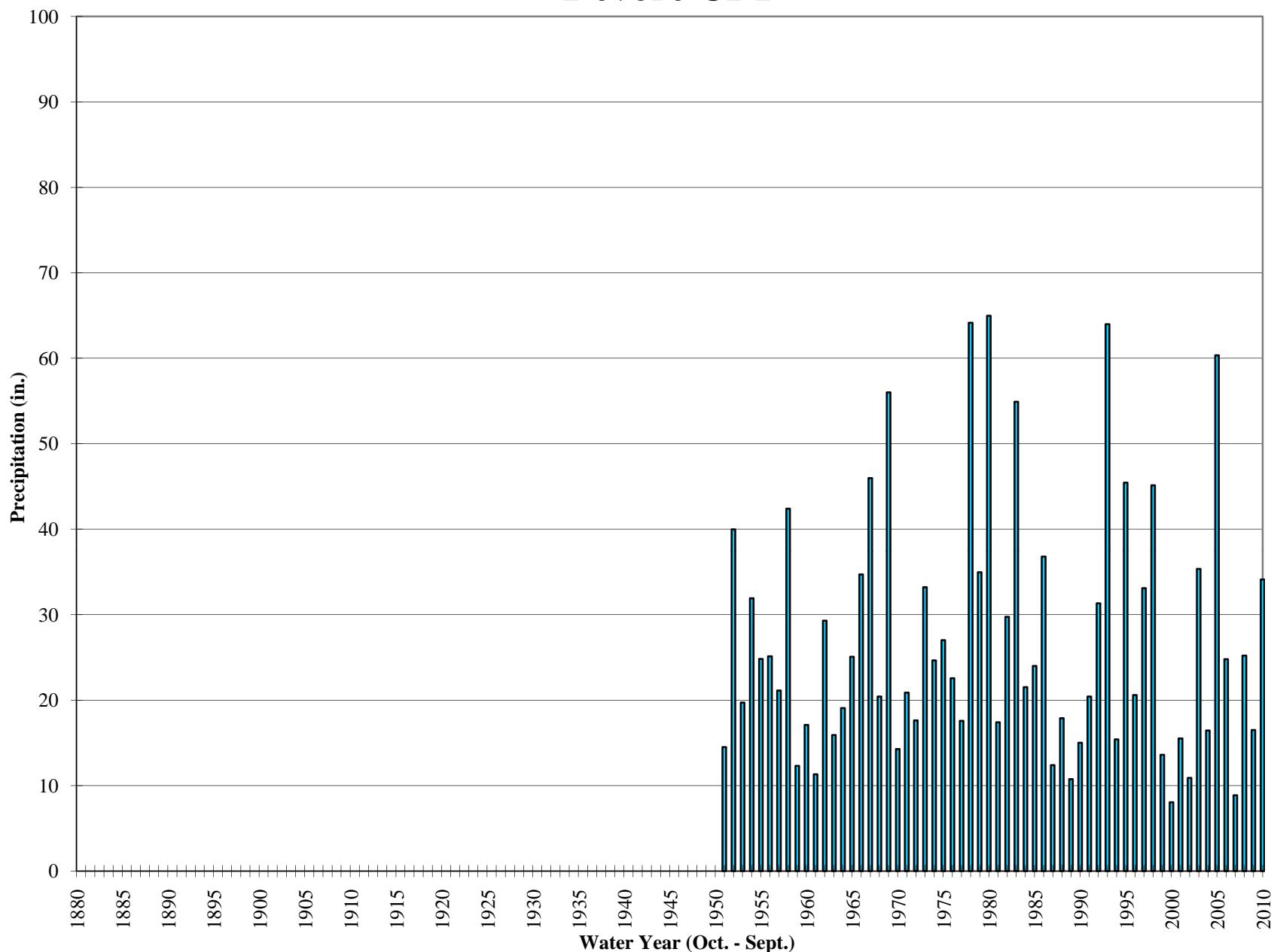
## SBC Hospital



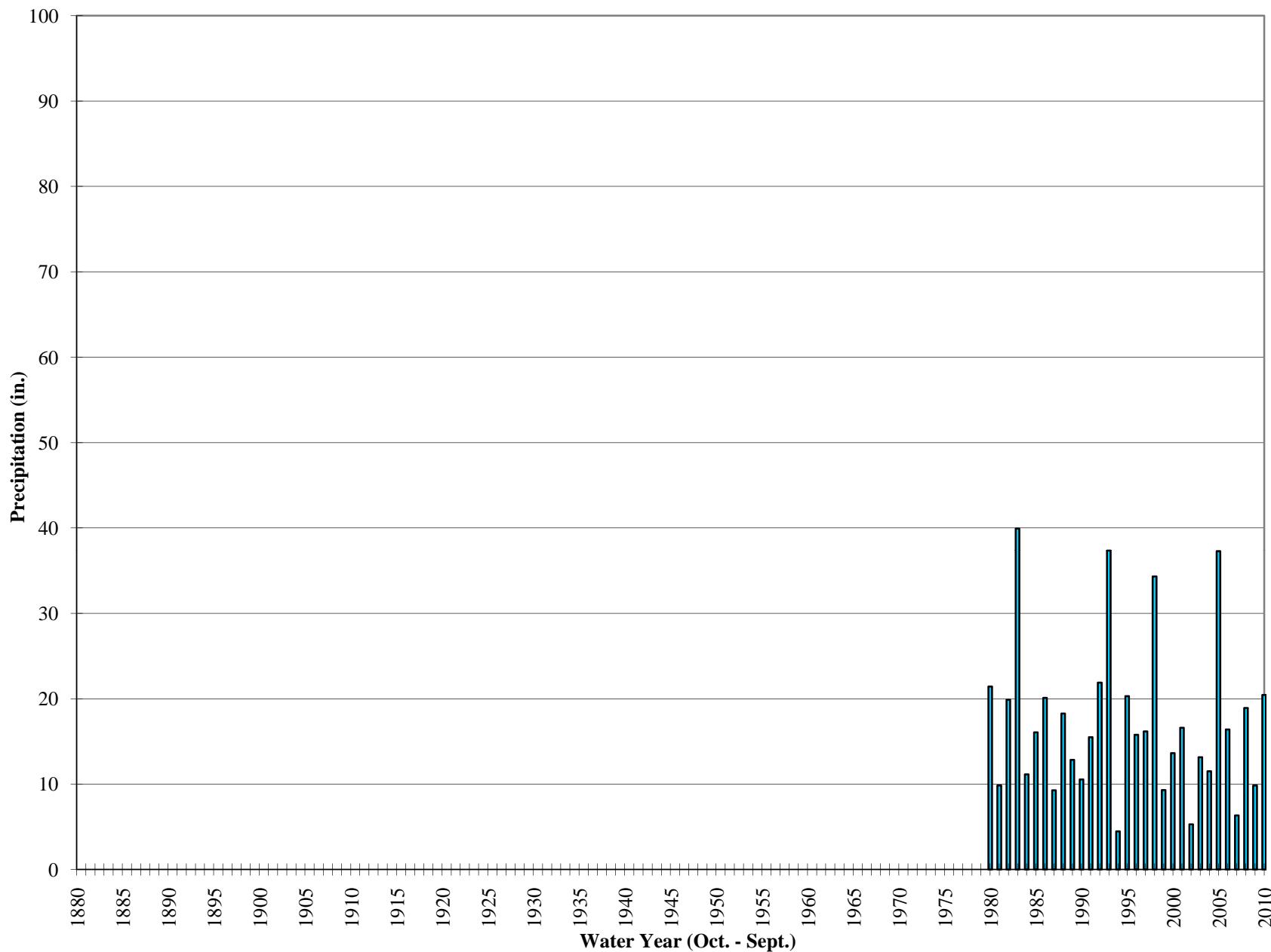
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## Historic Annual Precipitation Devore CDF

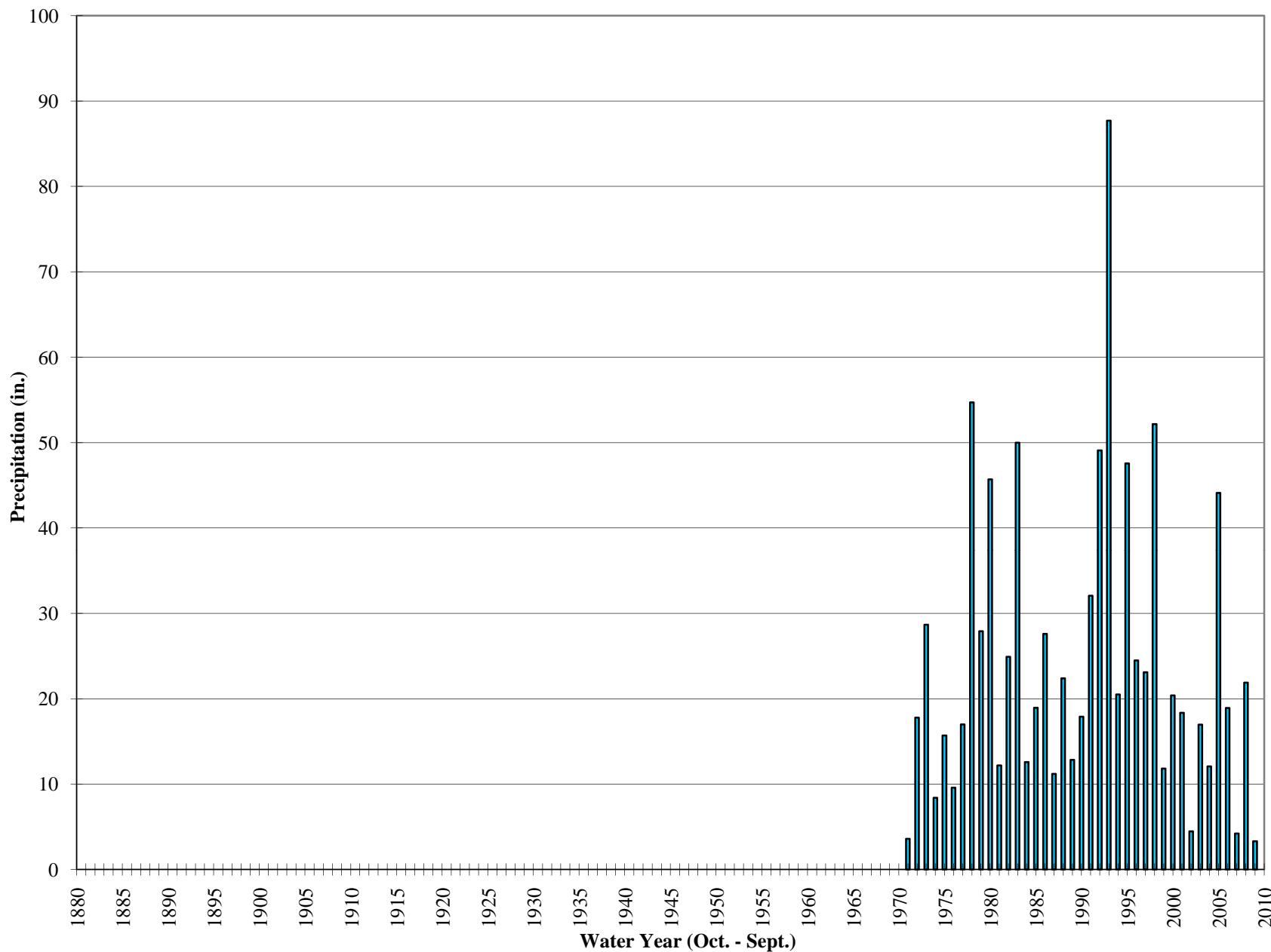


# **Historic Annual Precipitation SAN BERNARDINO - C.D.F.**



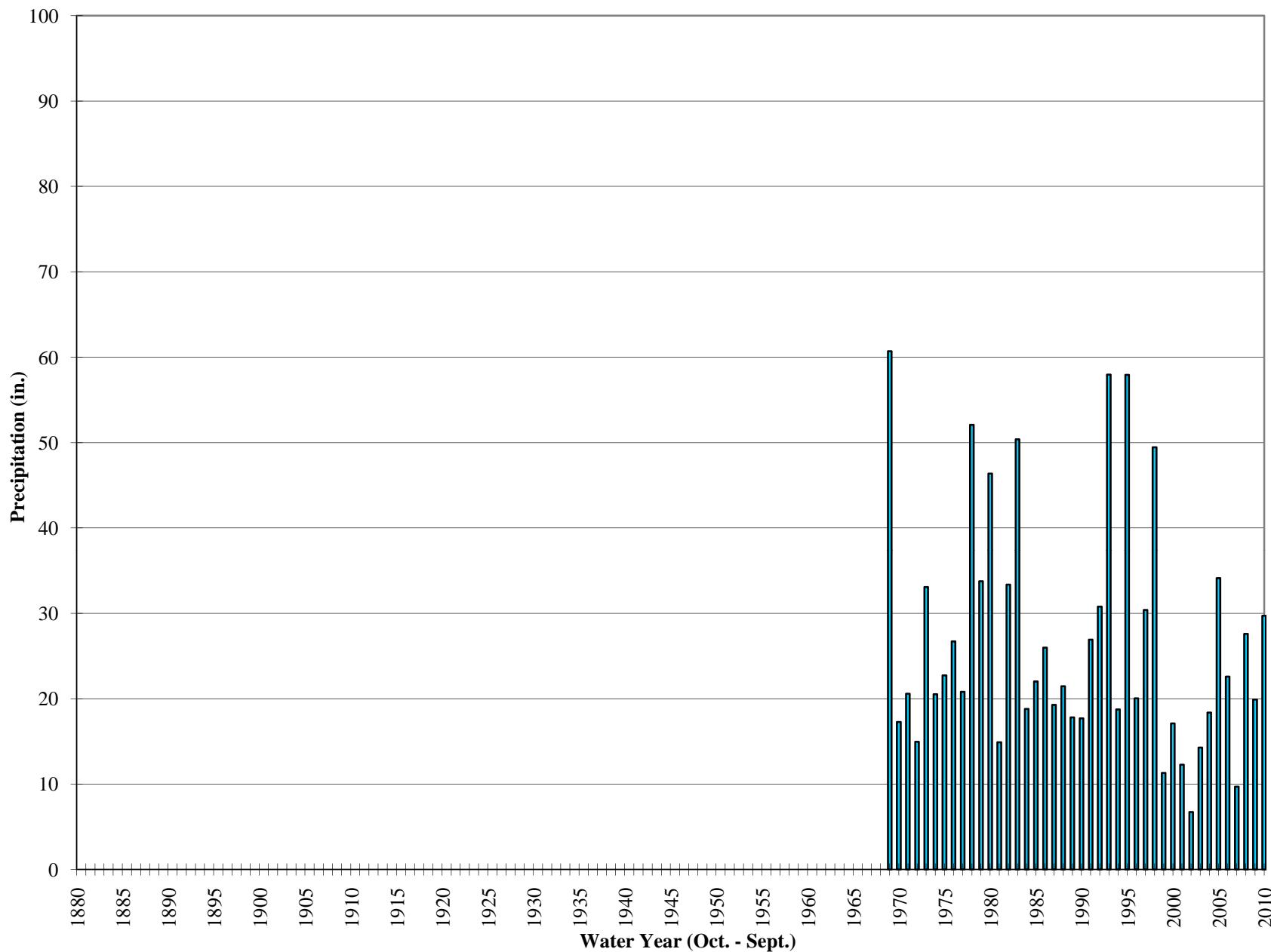
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## LC FS

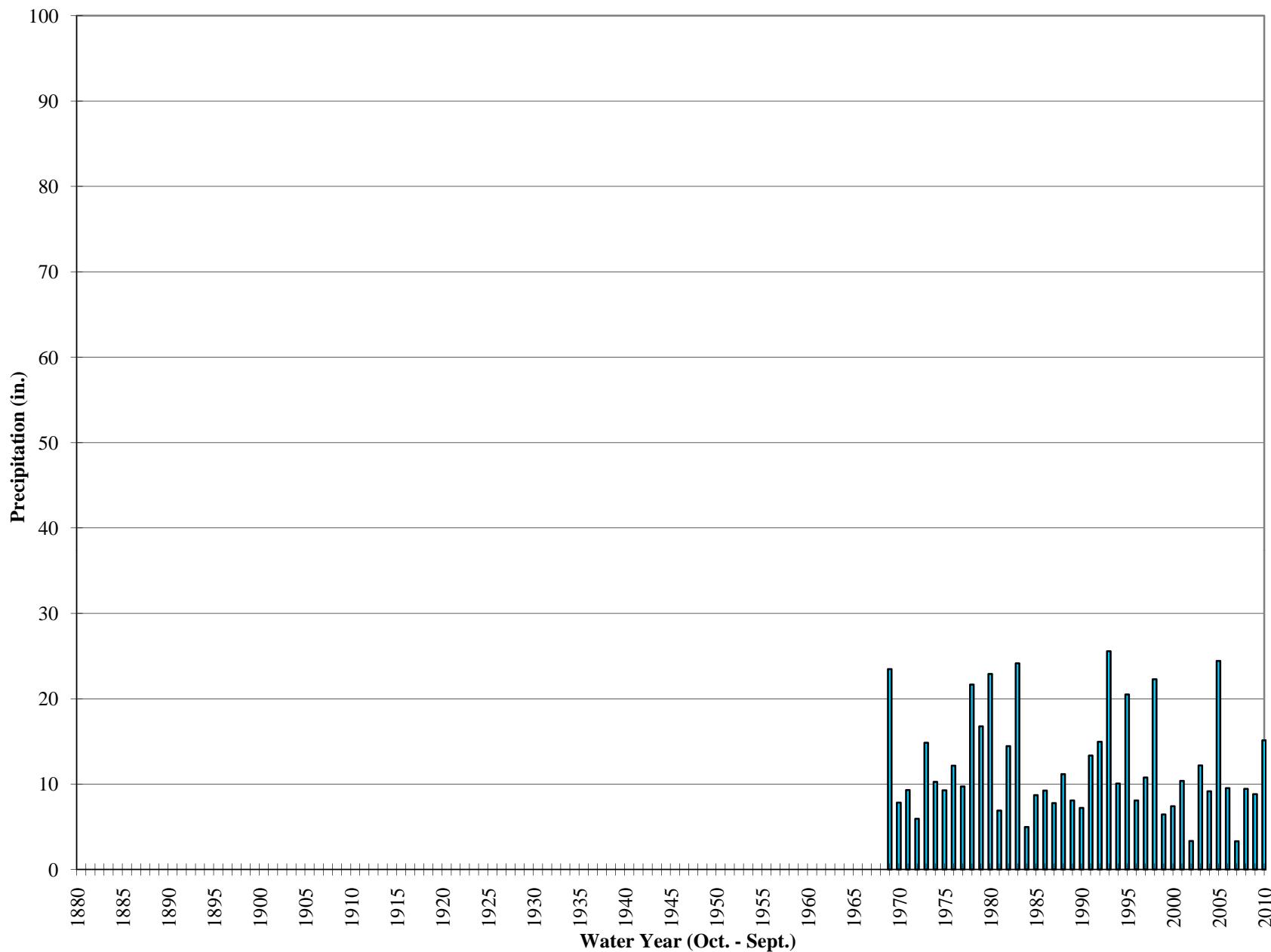


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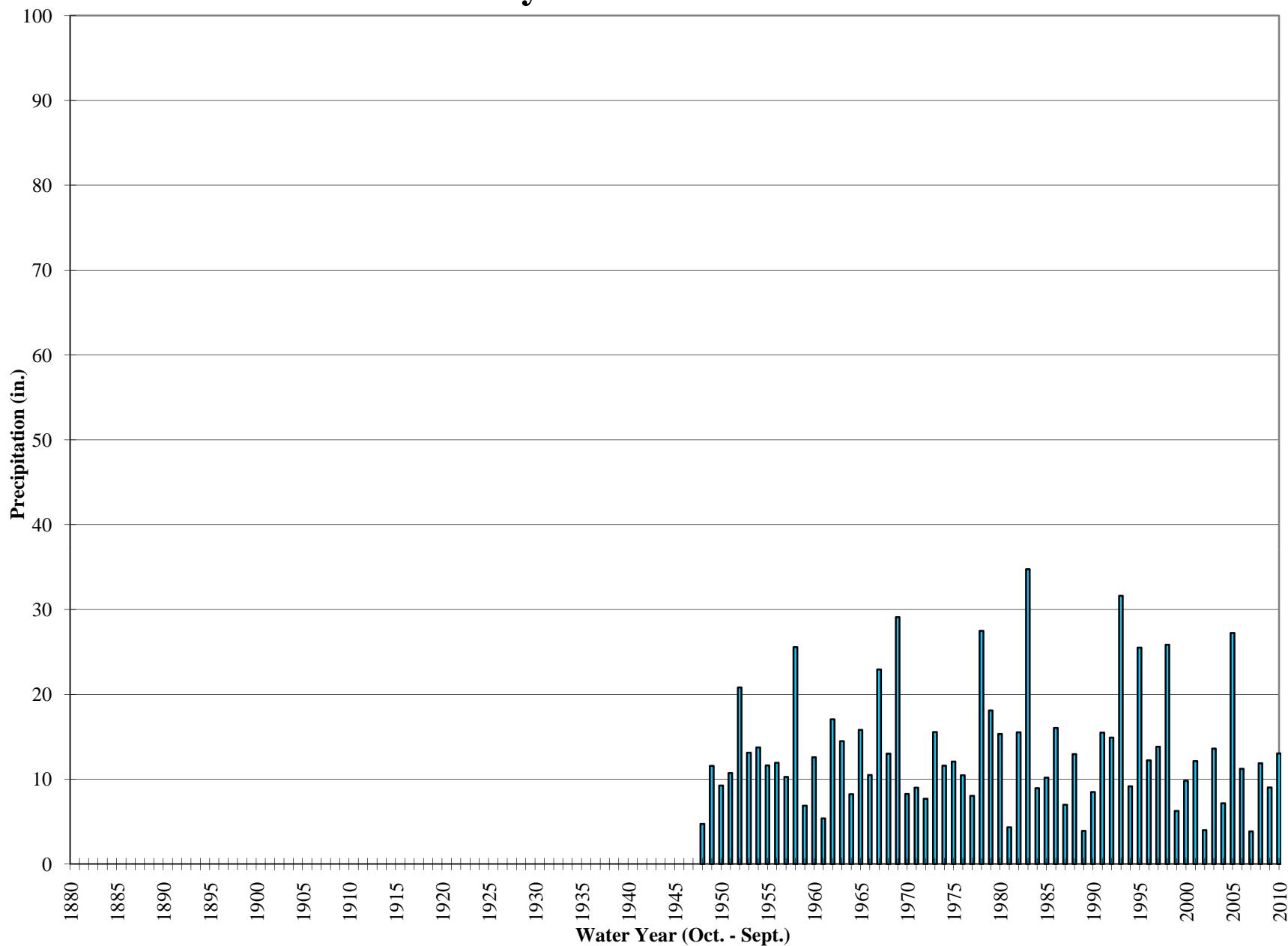
## Oak Glen



## Historic Annual Precipitation Redlands - Roth

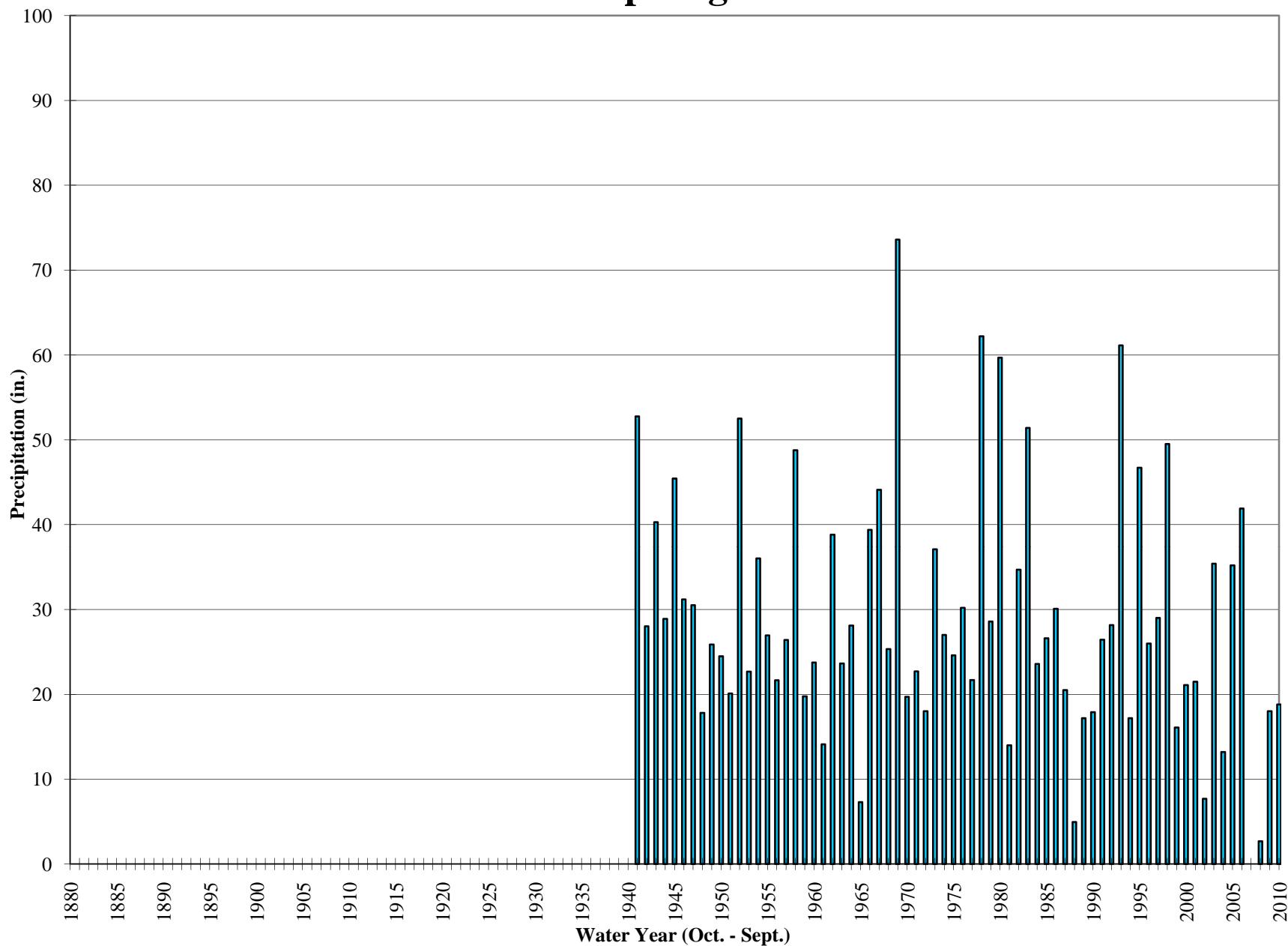


## Historic Annual Precipitation Lytle Creek Foothill

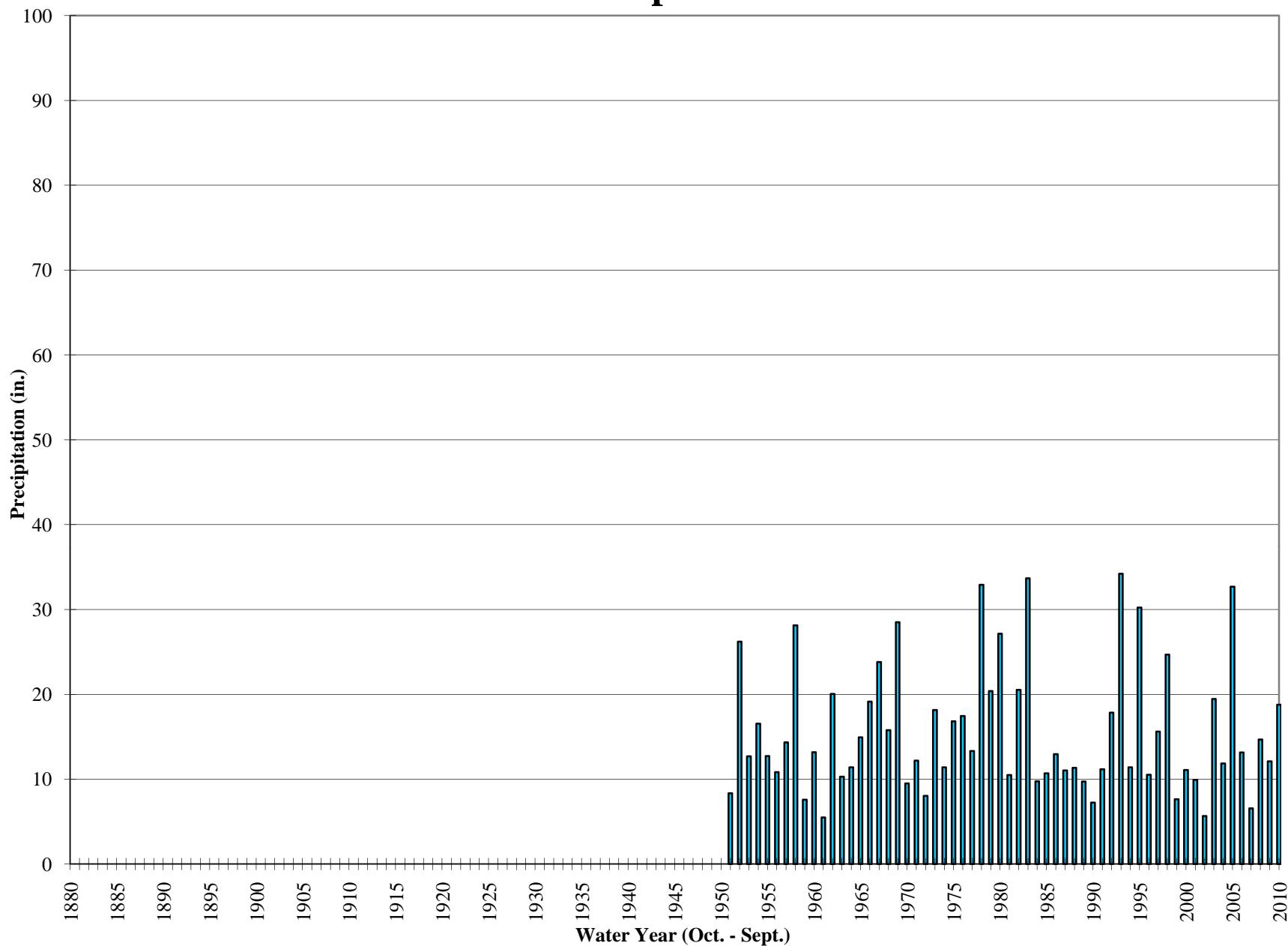


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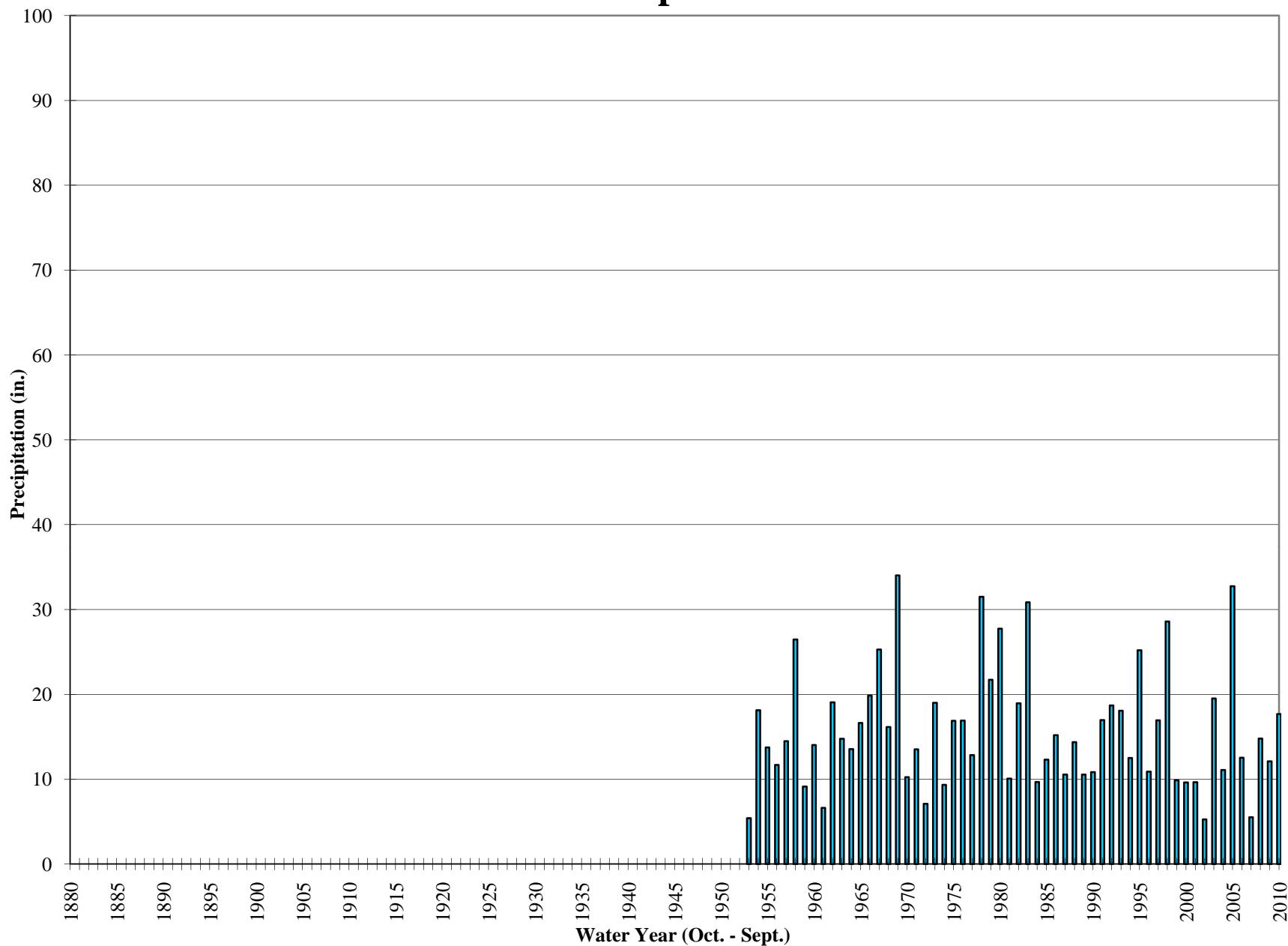
## Camp Angelus



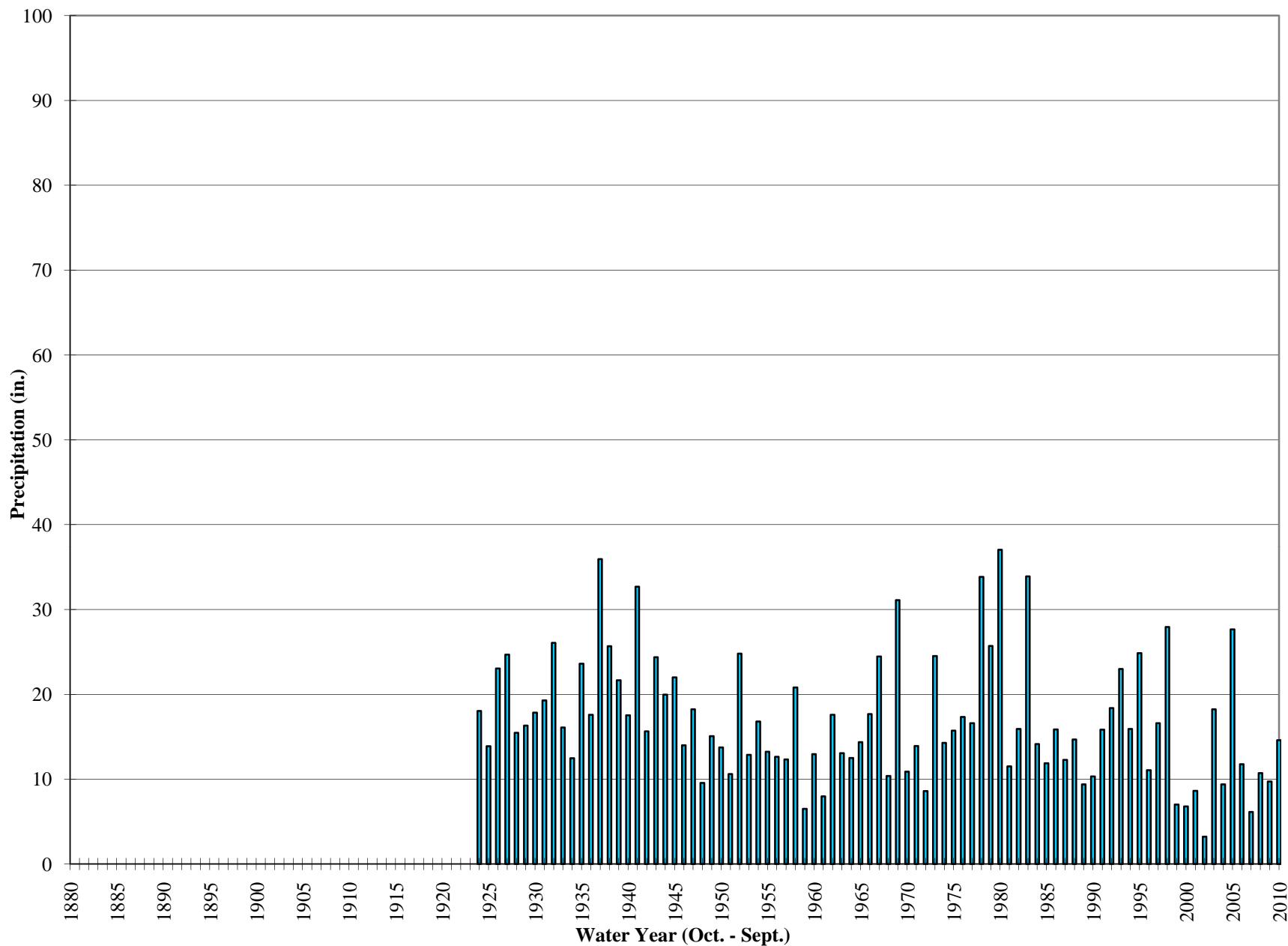
## Historic Annual Precipitation Yucaipa CDF



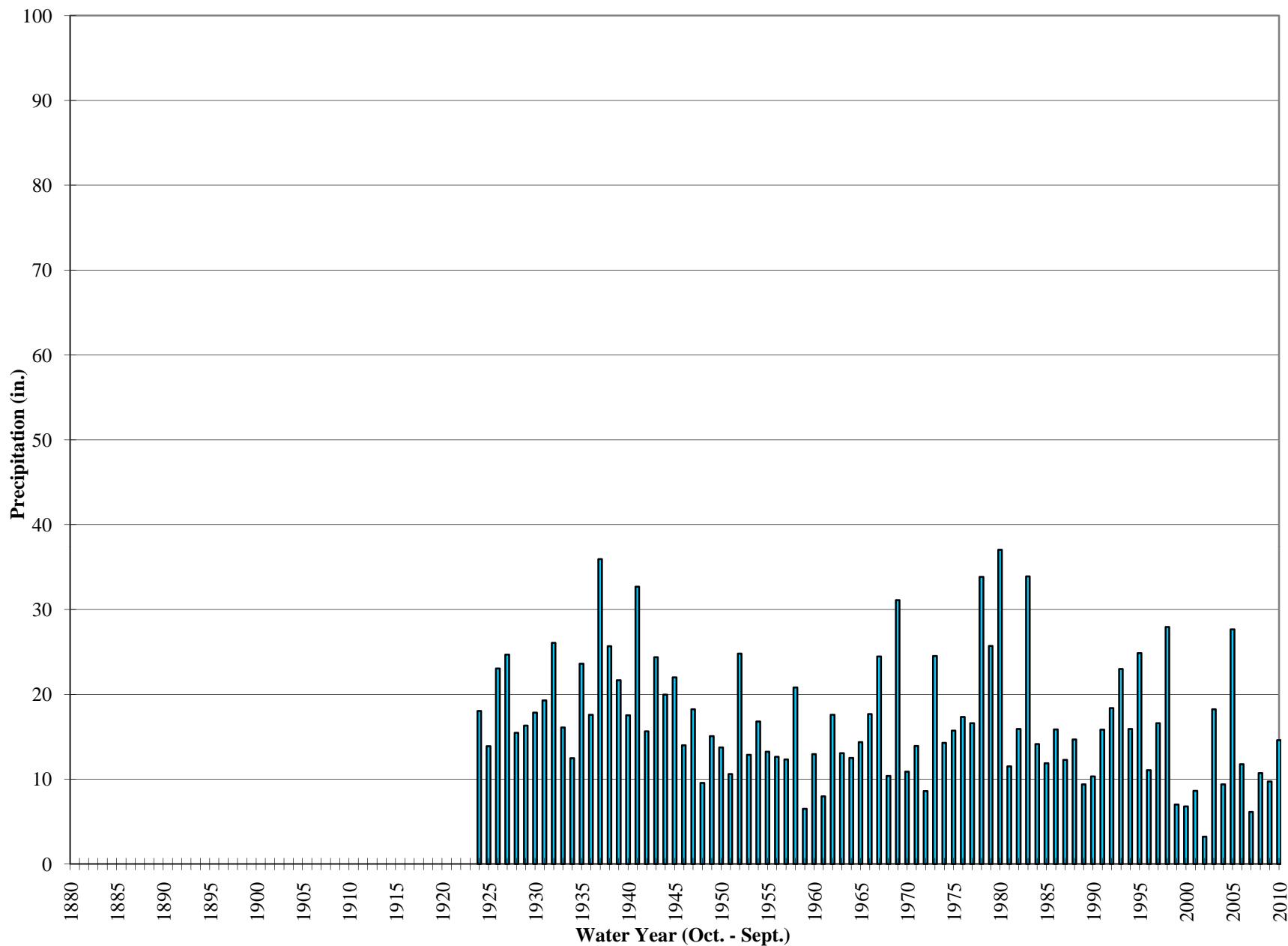
## Historic Annual Precipitation Yucaipa WD



## Historic Annual Precipitation Santa Ana PH #3

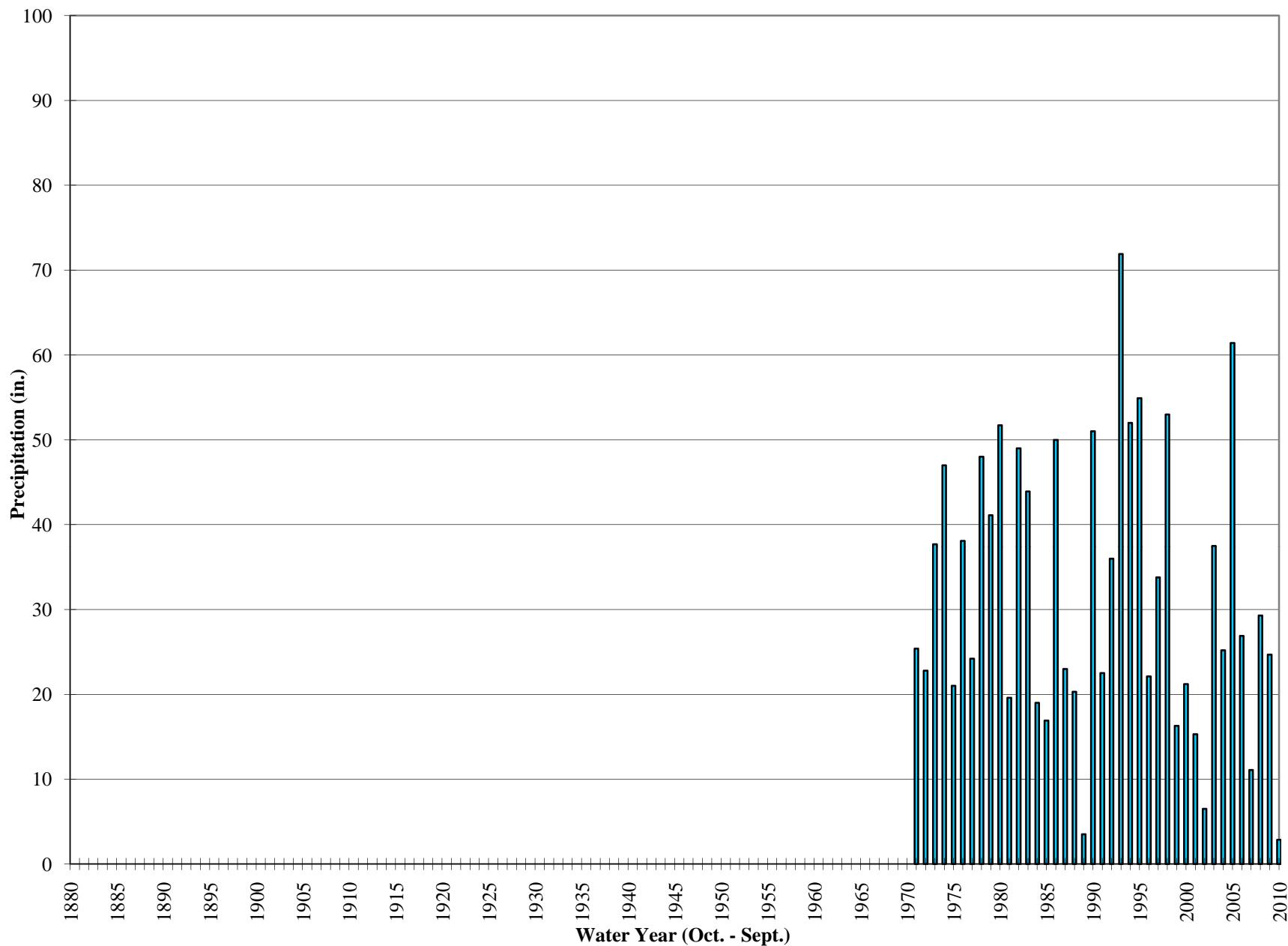


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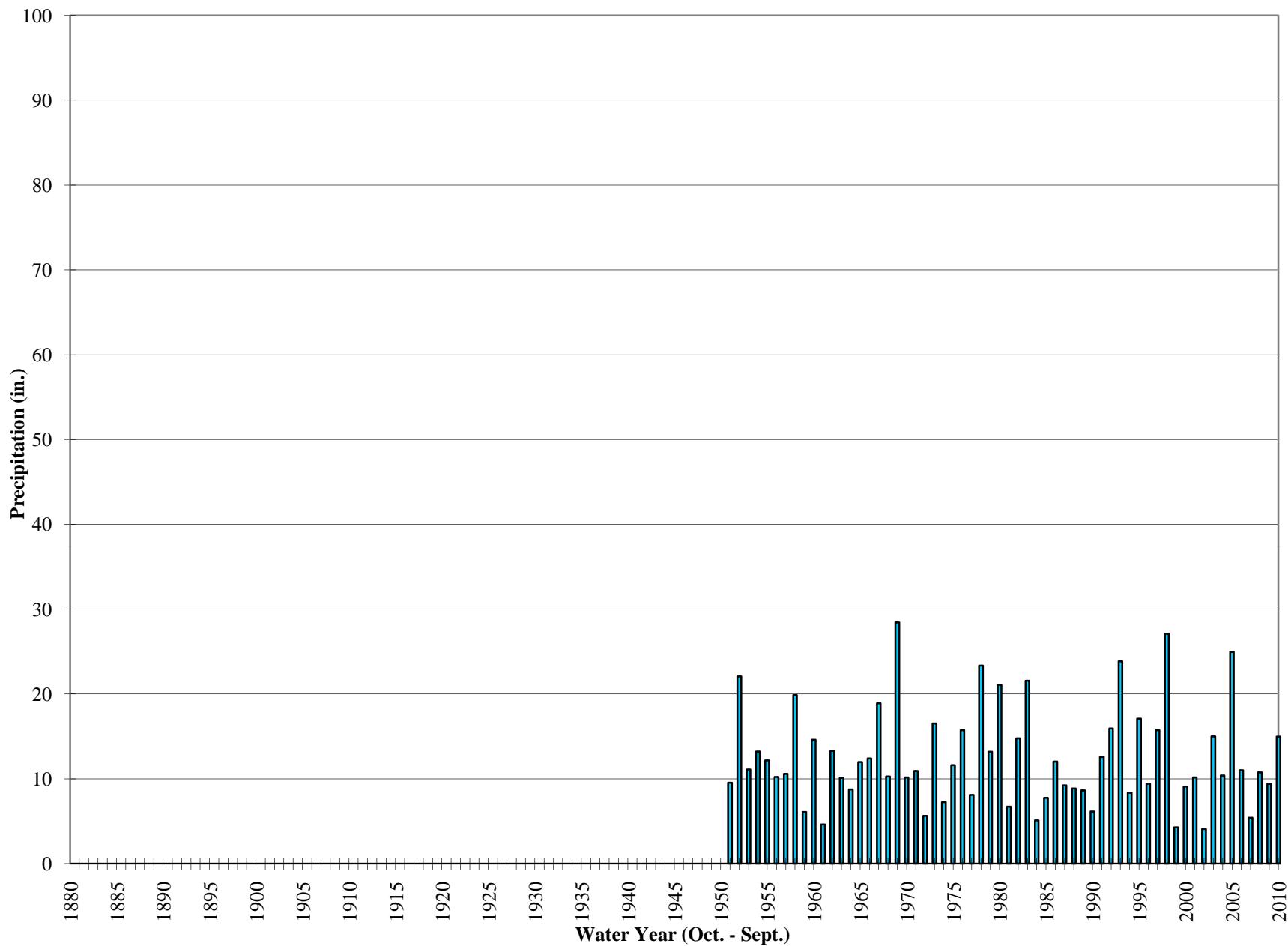


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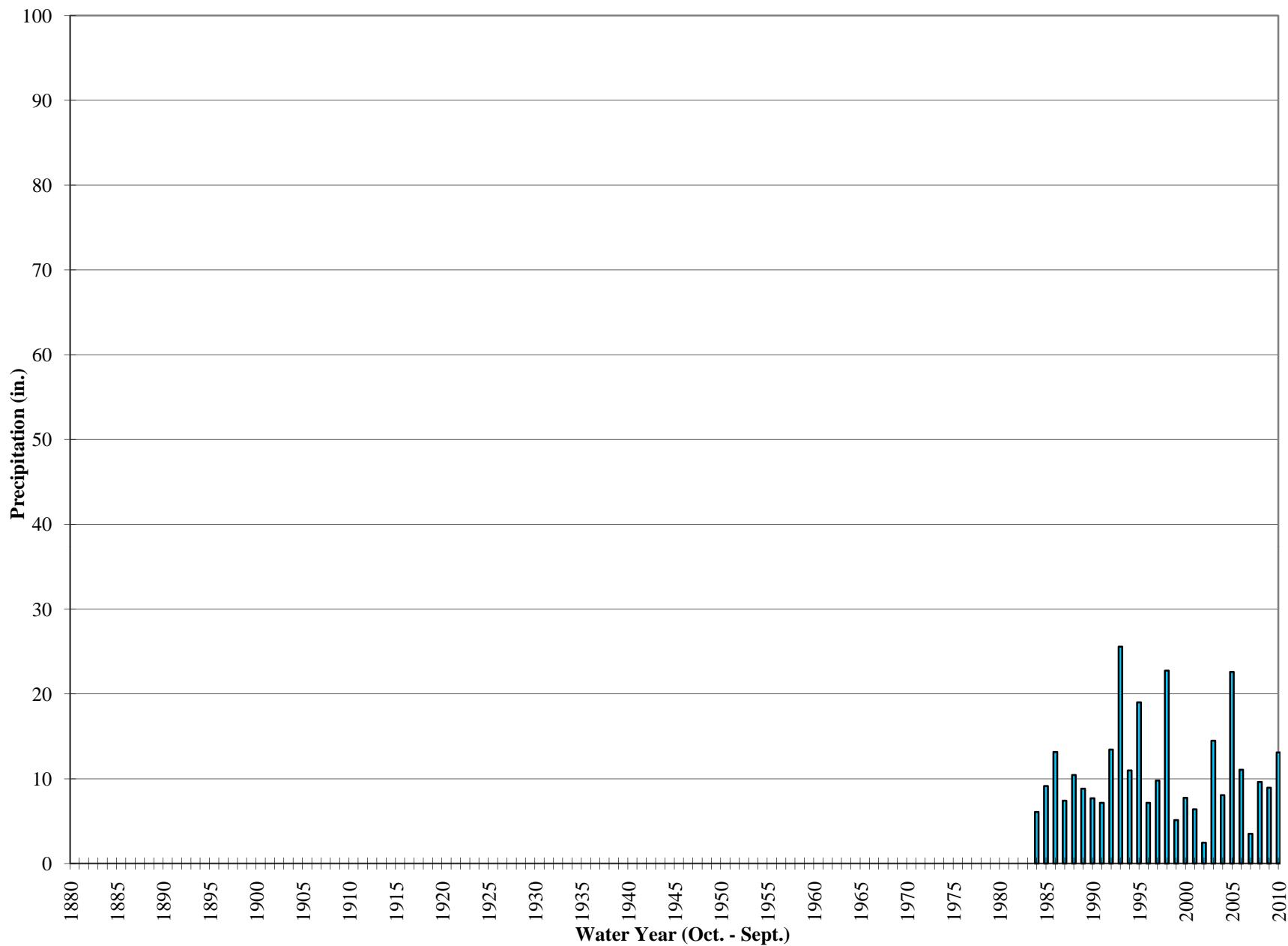
## Fallsville



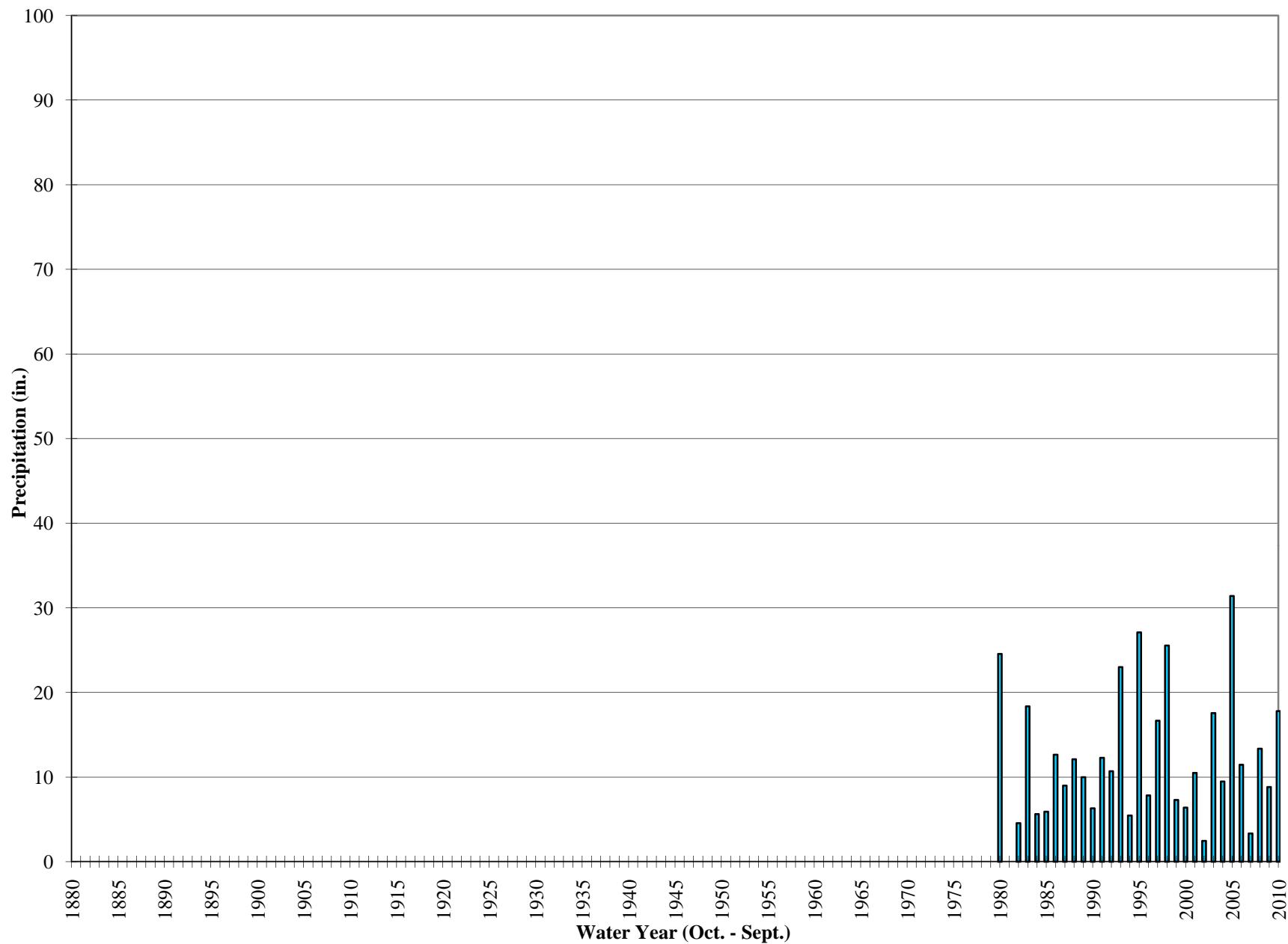
## Historic Annual Precipitation Mentone CDF



## Historic Annual Precipitation Loma Linda FD

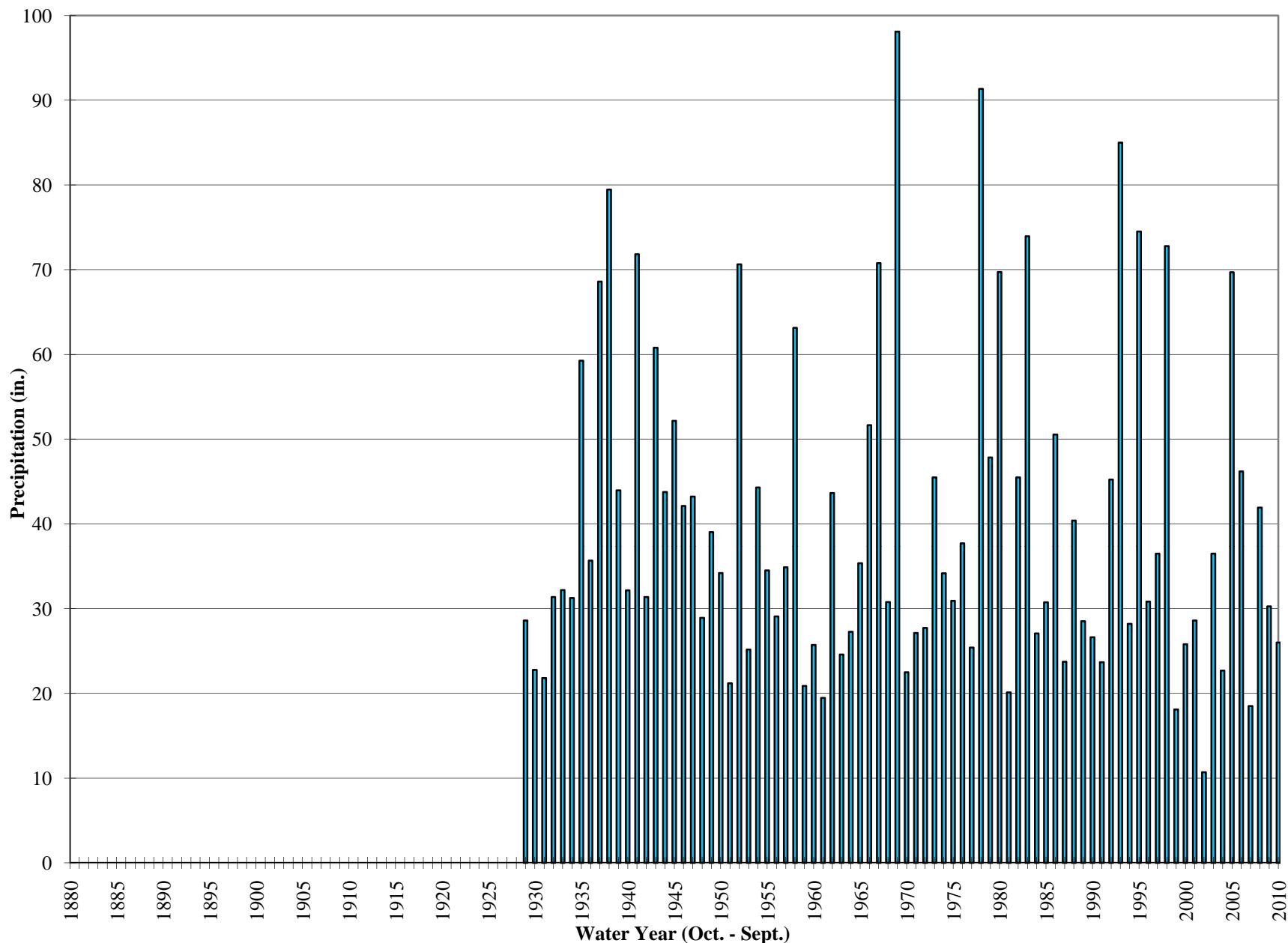


## Historic Annual Precipitation Crafton Hills FS#18



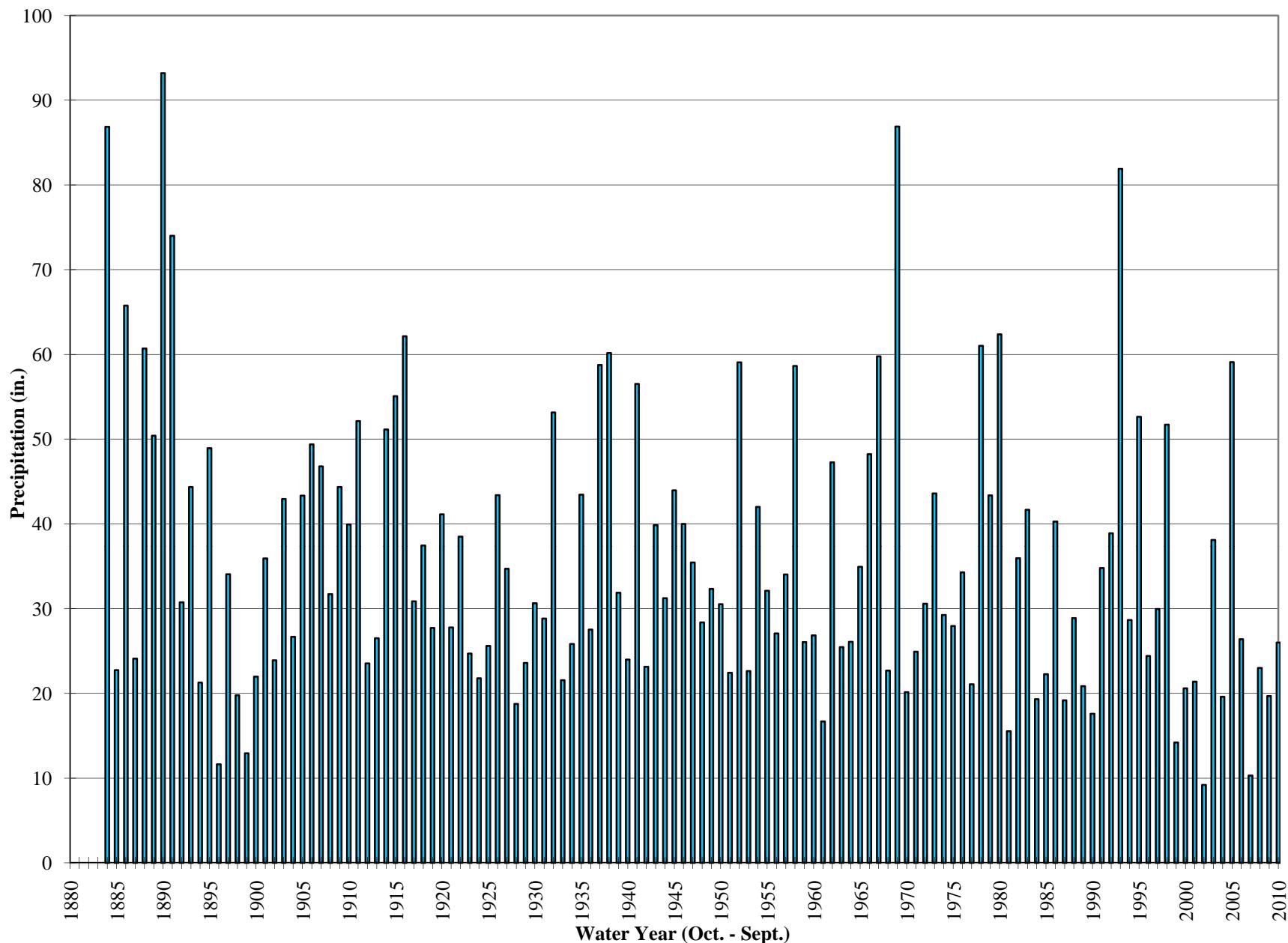
# Historic Annual Precipitation

## Lake Arrowhead



# Historic Annual Precipitation

## BB Dam



# Historic Annual Precipitation

## Big Bear City-BBCSD

