APPENDIX 6d

Evaluation of the Local Storage Limitation Solutions

FINAL REPORT FEBRUARY 2021

Evaluation of the Local Storage Limitation Solution

PREPARED FOR

Chino Basin Watermaster

PREPARED BY

WEST YOST
Water. Engineered.

Evaluation of the Local Storage Limitation Solution

Prepared for

Chino Basin Watermaster

Project No. 941-80-20-36

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FINAL REPORT | FEBRUARY 2021

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Appendix A. Hydrographs of Projected Groundwater Elevations with Pumping and New Land Subsidence Sustainability Metrics

LIST OF ACRONYMS AND ABBREVIATIONS

af	Acre-feet
afy	Acre-feet Per Year
CVM	Chino Valley Model
DYYP	Dry-Year Yield Program
IEUA	Inland Empire Utilities Agency
LSLS	Local Storage Limitation Solution
MPI	Material Physical Injury
MVWD	Monte Vista Water District
OBMP	2000 Optimum Basin Management Program
SYR1 Scenario	2020 SYR1 Scenario
Watermaster	Chino Basin Watermaster

1.0 INTRODUCTION

1.1 Background, Investigation, and Expected Use of this Report

In 2017, the Chino Basin Watermaster (Watermaster) began the process of updating the 2000 Optimum Basin Management Program (OBMP) by investigating how storage space in the Chino Basin would be used in the future. Watermaster conducted the Storage Framework Investigation to provide it the tools and technical information necessary to enable the development of a storage management plan. The goals of the Storage Framework Investigation were to describe how the basin will respond to the use of storage space, the potential material physical injury (MPI) and adverse impacts (if any) from the future use of storage space, and to develop descriptions of various approaches to mitigate MPI and adverse impacts. Watermaster completed the Storage Framework Investigation in October 2018 (WEI, 2018)[1]. Watermaster conducted a robust stakeholder process to facilitate development of the Storage Framework Investigation. A total of eight (8) stakeholder workshops were conducted over 15 months and offered multiple opportunities for the Chino Judgment parties and others to review interim products and provide input in the Storage Framework Investigation. Watermaster used the 2015 version of its Chino Basin groundwater model to evaluate the basin response from the use of increasing amounts of storage space. The amount of storage space to be used by the Judgment parties was projected to be about 700,000 acre-feet (af). The Storage Framework Investigation evaluated the basin response from the use of storage by the parties and others ranging from 700,000 af to 1,000,000 af.

Subsequently, Watermaster initiated stakeholder and technical processes to formally update the 2000 OBMP, completed that effort in 2020, and documented it in the 2020 OBMP Update report (WEI, 2020a)[2]. Included in the 2020 OBMP is a storage management plan that is based on the results of the 2018 Storage Framework Investigation. In October 2020, the Watermaster Board approved Resolution 20-06, whereby it adopted the 2020 OBMP report in its entirety. The Watermaster Board encouraged the Judgment parties to timely develop an implementation plan and an implementation agreement and support the necessary environmental review to commence the proposed activities in the 2020 OBMP.

In parallel with the development of the 2020 OBMP, Watermaster conducted an investigation to recalculate the Chino Basin *Safe Yield*[3], completed it in May 2020 (WEI, 2020b)[4], and obtained Court approval of the new Safe Yield in July 2020. The recalculation of the Safe Yield involved major updates to the Watermaster's groundwater model, including a recalibration. The updated groundwater model is called the 2020 Chino Valley Model (CVM). The storage space used by the Judgment parties was projected to be about 612,000 af or about 85,000 af less than projected in the 2018 Storage Framework Investigation.

During 2020, the Judgment parties recommended that Watermaster reevaluate the basin response to the use of storage space in the basin in a manner similar to that done in the 2018 Storage Framework Investigation with the new CVM. They requested that Watermaster evaluate the use of storage space for

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[1] The 2018 Storage Framework Investigation Report

[2] The 2020 OBMP Update Report

[3] *Capitalized and Italicized* terms are defined terms in the Judgment and Peace Agreements. Their first use in this document is both capitalized and italicized and thereafter they are only capitalized. Please see those documents for their definitions.

[4] The 2020 Safe Yield Recalculation Report

the current storage and recovery program called the Dry-Year Yield Program (DYYP). The DYYP can store up 100,000 af in addition to storage by the Judgment parties. The DYYP is set to terminate in 2028. The Judgment parties have not provided Watermaster a plan to use storage space for any storage and recovery programs after the DYYP terminates. The Local Storage Limitation Solution (LSLS) comprises the parties' projected use of storage through 2035 and the assumed operations of the DYYP through 2028. The parties recommended that the evaluation of the basin response for the use of storage space in excess of this amount be deferred. Uncertainty in the projections exists due to the fluctuation of managed storage in the years immediately following the termination of the DYYP and the parties' future groundwater pumping plans to recover their water in managed storage. Accordingly, the LSLS project is defined as increasing the managed storage to 700,000 af until June 30, 2030, and then decreasing to 620,000 af from July 1, 2030 through June 30, 2035.

This report documents the evaluation of basin response from the combined use of storage space by the Judgment parties and the existing DYYP. This evaluation is based on the Judgment parties' best estimates of groundwater pumping and recharge that were used in the 2020 Safe Yield recalculation. This evaluation includes an assessment of potential MPI and adverse impacts. The information reported herein will be used by IEUA to prepare environmental documentation pursuant to the California Environmental Quality Act for the use of this storage space.

1.2 MPI, Adverse Impacts, and Performance Metrics

Pursuant to the Peace Agreement, MPI means material injury that is attributable to the Recharge, Transfer, storage and recovery, management, movement or Production of water, or implementation of the OBMP, including, but not limited to, degradation of water quality, liquefaction, land subsidence, increases in pump lift (lower water levels) and adverse impacts associated with rising groundwater. Material Physical Injury does not include "economic injury" that results from other than physical causes. Once fully mitigated, physical injury shall no longer be considered to be material. [Peace Agreement § 1.1(y).]

Adverse impacts as used the 2020 OBMP storage management plan include but are not limited to reductions in net recharge and Safe Yield and increases in the groundwater discharge from the Chino North Groundwater Management Zone to the Santa Ana River contributing to a loss of Hydraulic Control.

The term "managed storage" as used herein refers to water stored by the parties and other entities and includes Carryover, Local Storage and Supplemental Water held in storage accounts by the parties and Storage and Recovery Programs. Local Storage includes Excess Carryover for the Overlying Non-Agricultural Pool parties and Excess Carryover and Supplemental Waters for the Appropriative Pool and Overlying Non-Agricultural Pool Parties.

Since the Judgment came into effect, Watermaster developed rules and regulations, standard storage agreements and related forms, and it developed the OBMP and the Peace Agreements that implement the OBMP. In evaluating applications for storage agreements, Watermaster must conduct an investigation to determine if the water stored and recovered under a proposed storage agreement will cause MPI to a party or the basin. If Watermaster determines that implementation of the proposed storage agreement will cause MPI, then the applicant must revise its application so there is no MPI or Watermaster must impose conditions in the storage agreement to ensure there is no MPI. Watermaster cannot approve a storage agreement that will result in MPI. In addition to MPI assessment, the storage management plan in the 2020 OBMP requires Watermaster to identify the potential adverse impacts and that they be mitigated. Watermaster uses the following performance metrics to evaluate MPI and adverse impacts for the use of managed storage.

- Change in net recharge and Safe Yield – adverse impact
- Change in groundwater levels – MPI
- Change in pumping sustainability – MPI
- Change in new land subsidence – MPI
- Change in the state of Hydraulic Control (change in groundwater discharge from the Chino North GMZ to the Santa Ana River) – adverse impact
- Change in the direction and speed of known plumes – MPI

These performance metrics are described in detail in Section 2 of the 2018 Storage Framework Investigation (WEI, 2018) and they were reevaluated for the storage space used by the Judgment parties and reported in the 2020 Safe Yield Recalculation (WEI, 2020b).

1.3 Strategy to Evaluate MPI and Adverse Impacts

In 2020, Watermaster evaluated the performance metrics described above, except for change in direction and speed of known plumes, for the Judgment parties' projected use of storage space in the 2020 Safe Yield recalculation. The groundwater pumping and recharge projections used in the 2020 Safe Yield recalculation form the baseline planning scenario for this investigation and the CVM projection of the basin response is the assumed baseline condition for the Chino Basin. The amount of storage space used by the Judgement parties was projected to rise from the present estimate of 503,000 af in July 2019 to about 612,000 af in 2031 and to gradually decline for several decades thereafter. One conclusion of that effort was that no MPI was projected to occur through 2030 at a Safe Yield of 131,000 acre-feet per year (afy).

The present investigation is an evaluation of MPI and adverse impacts due to the use of storage space by the Judgment parties and the DYYP. The DYYP contract terminates in 2028. To evaluate the long-term impacts of conducting the DYYP, the effects of the use of storage space by the parties and the DYYP are evaluated through 2038, spanning a 20-year planning horizon. To determine if the implementation of the LSLS could cause MPI and adverse impacts, the basin response for the use of this space was estimated with the CVM and compared to the baseline basin response developed for the Safe Yield recalculation.

1.4 Report Organization

This report consists of four Chapters including Chapter 1 Introduction and the following:

- **Chapter 2 Description of the Local Storage Limitation Solution** – this chapter describes the assumptions used to put water into and take it from the 100,000 af DYYP in excess of the managed storage projected to be used by the parties.
- **Chapter 3 Basin Response and Evaluation of MPI and Adverse Impacts** – this chapter describes the basin response to the LSLS using the metrics summarized in Section 1.2 above using the same strategy used in the 2018 Storage Framework Investigation and summarized in Section 1.3 above.
- **Chapter 4 References** – this chapter contains a list of references cited in the prior chapters.
- **Appendix A Hydrographs of Projected Groundwater Elevations with Pumping and New Land Subsidence Sustainability Metrics**

2.0 BACKGROUND

The LSLS comprises the parties' projected use of storage through 2035 and the assumed operations of the DYYP through 2028. To evaluate the basin response to the LSLS, a model scenario was developed to simulate the puts and takes of the Judgment parties that implement the DYYP in addition to the baseline behavior modeled in the 2020 SYR1 scenario (referenced herein as the SYR1 scenario) used in the 2020 Safe Yield recalculation. The scenario used to model the LSLS is referenced herein as the LSLS scenario.

Table 2-1 summarizes the operational cycles and the associated puts and takes for the DYYP among the existing facilities for the LSLS scenario. As of June 30, 2018, the balance of DYYP water in storage is 41,380 af. This storage is already included in the SYR1 scenario and it was assumed that it remained in storage throughout the planning period. To reach the total storage balance of 100,000 af above the parties' baseline storage, the LSLS scenario assumes that puts will occur over the first three years. The puts are assumed to total 19,540 af each of these three years to add up to 100,000 af. The LSLS scenario conducts storage and recovery in one ten-year operating cycle, consisting of three (3) put years followed by four (4) hold years and three (3) take years, not including operations prior to FY2019. This operating pattern is similar to that used in the planning of the DYYP and the 2018 SFI. The operating assumptions for the puts and takes are described Sections 2.2 and 2.3. The LSLS scenario simulates the operating cycle beginning on July 1, 2018, the beginning of the model projection period of the SYR1 scenario, and concluding on June 30, 2028, coinciding with the termination of the DYYP contract.

Table 2-1. Summary of the LSLS Scenario Operating Cycle

Category	Amount
Operating Cycle	
Storage space used above the parties' planned use of storage, af	100,000
Balance in DYYP storage accounts through FY2018, af	41,380
Operating Cycle Length, yr	10
Number of Put Years in Operating Cycle (beginning in FY2019)	3
Number of Hold Years in Operating Cycle	4
Number of Take Years in Operating Cycle	3
Puts, afy	
Existing In-Lieu Capacity Used	9,770
Existing Spreading Basin Recharge Capacity Used	7,030
Existing Aquifer Storage and Recovery (ASR) Capacity Used	2,740
Total Existing Put Capacity Used	19,540
Take, afy	
Takes Through Existing Facilities	33,333

Figure 2-1 is a map of the Chino Basin that shows the water service area boundaries and facilities relevant to the evaluation of the LSLS scenario. This highlights water service area boundaries for the Appropriative Pool parties participating in the DYYP where in-lieu recharge and/or takes are assumed to occur, spreading basins where imported water is assumed to be recharged in put years, and Monte Vista Water District's (MVWD's) ASR wells where puts are assumed to occur.

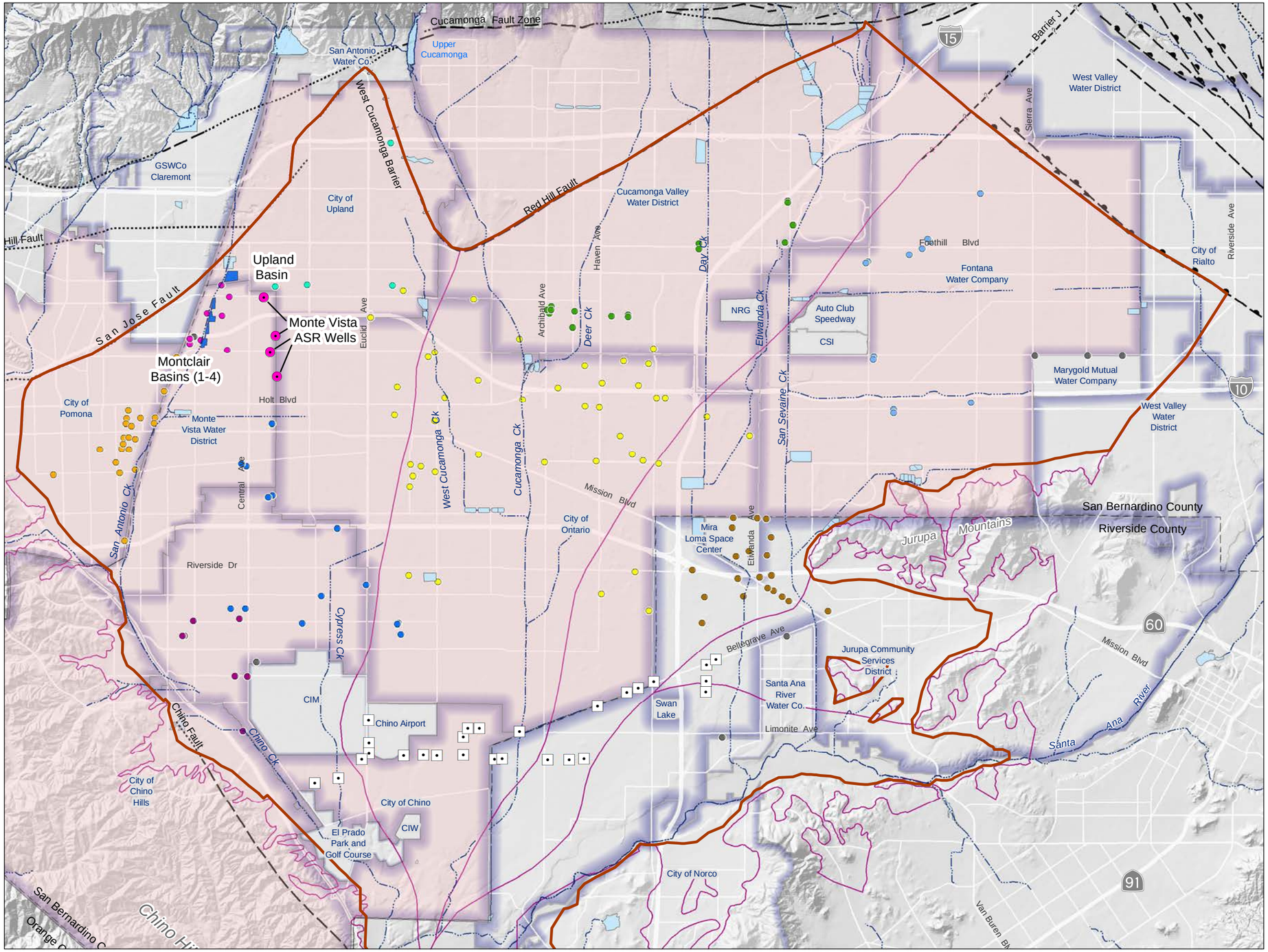
Figure 2-2 shows the planned end-of-year managed storage for the SYR1 scenario and the LSLS scenario. The maximum planned managed storage for the LSLS scenario is 700,000 af, projected to occur in 2025. The DYYP storage is depleted by the end of 2028, and the managed storage thereafter follows the projected managed storage that was projected in the baseline scenario.

2.1 Project Definition of the LSLS

Based on the projected managed storage shown in Figure 2-2, the LSLS is defined by the use of storage space up to 700,000 af through June 30, 2030 and then decreasing to 620,000 af from July 1, 2030 through June 30, 2035. This definition balances the need to provide for the combined use of managed storage by the parties and the DYYP through the end of the DYYP contract period (2028) and the parties' maximum projected use of managed storage in the early 2030s against future uncertainty. This uncertainty includes the possible fluctuations in managed storage in the years immediately following the termination of the DYYP contract and the parties' future groundwater pumping plans to recover their water in managed storage after 2035.

2.2 Operating Assumptions for Puts

The facility and operational assumptions for the LSLS scenario are based on the Inland Empire Utilities Agency's (IEUA's) and the Appropriative Pool parties' contractual obligations for the DYYP. These obligations do not prescribe methods for puts; therefore, the parties can conduct put operations through a combination of wet-water and in-lieu recharge methods. Puts for the LSLS scenario were assumed to be conducted half by wet-water recharge and half by in-lieu recharge which is identical to the assumption used in the 2018 SFI for the first 100,000 af of storage space used in excess of that projected to be used by the Judgment parties. Table 2-2 shows the assumed allocation of the puts. Each party's annual in-lieu recharge was the lesser of the following: 1) the party's put calculated proportionally to its take obligation and 2) the party's capacity for in-lieu recharge. Chino Hills is an exception in that it does not have in-lieu recharge capacity; MVWD's put obligation was raised by the share of puts originally allocated to Chino Hills. About 2,740 afy of puts were assumed to occur at the MVWD's ASR wells and about 7,030 afy of puts were assumed to be recharged in existing spreading basins (see Figure 2-1 for locations). Wet-water recharge in spreading basins was conducted using the following schedule: recharge occurs in MZ-1 first up to its spreading capacity, then in MZ-3 up to its spreading capacity, and finally in MZ-2. Sufficient capacity exists in MZ-1 for the planned 7,030 afy. This results in the distribution shown in Table 2-2.



Facilities for Conducting Wet-Water Recharge Puts in the LSLS Scenario

- Monte Vista Water District ASR Wells
- Flood Control & Conservation Basins used for Puts

Appropriative Pool Pumping Wells

- City of Chino
- City of Chino Hills
- City of Ontario
- City of Pomona
- City of Upland
- Cucamonga Valley Water District
- Fontana Water Company
- Jurupa Community Services District
- Monte Vista Water District
- Other Appropriators

- Chino Desalter Wells
- Streams & Flood Control Channels
- Chino Basin Part of the Active CVM MODFLOW Domain
- OBMP Management Zones
- WSA of Appropriative Pool Parties Assumed to Participate in the Puts and/or Takes in the LSLS Scenario
- Other Water Service Areas
- Flood Control & Conservation Basins not Used in Puts

Prepared by:

WEST YOST

Author: TA
Date: 2/3/2021
File: Figure 2-1 Chino Basin Map.mxd

0 1 2 3 4 5 Miles
0 2 4 6 8 Km

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CHINO BASIN WATERMASTER — Partners in Basin Management

Chino Basin and Facilities used in the LSLS Scenario

Figure 2-1

Figure 2-2. Planned End-of-Year Volume in Managed Storage for the SYR1 and LSLS Scenarios

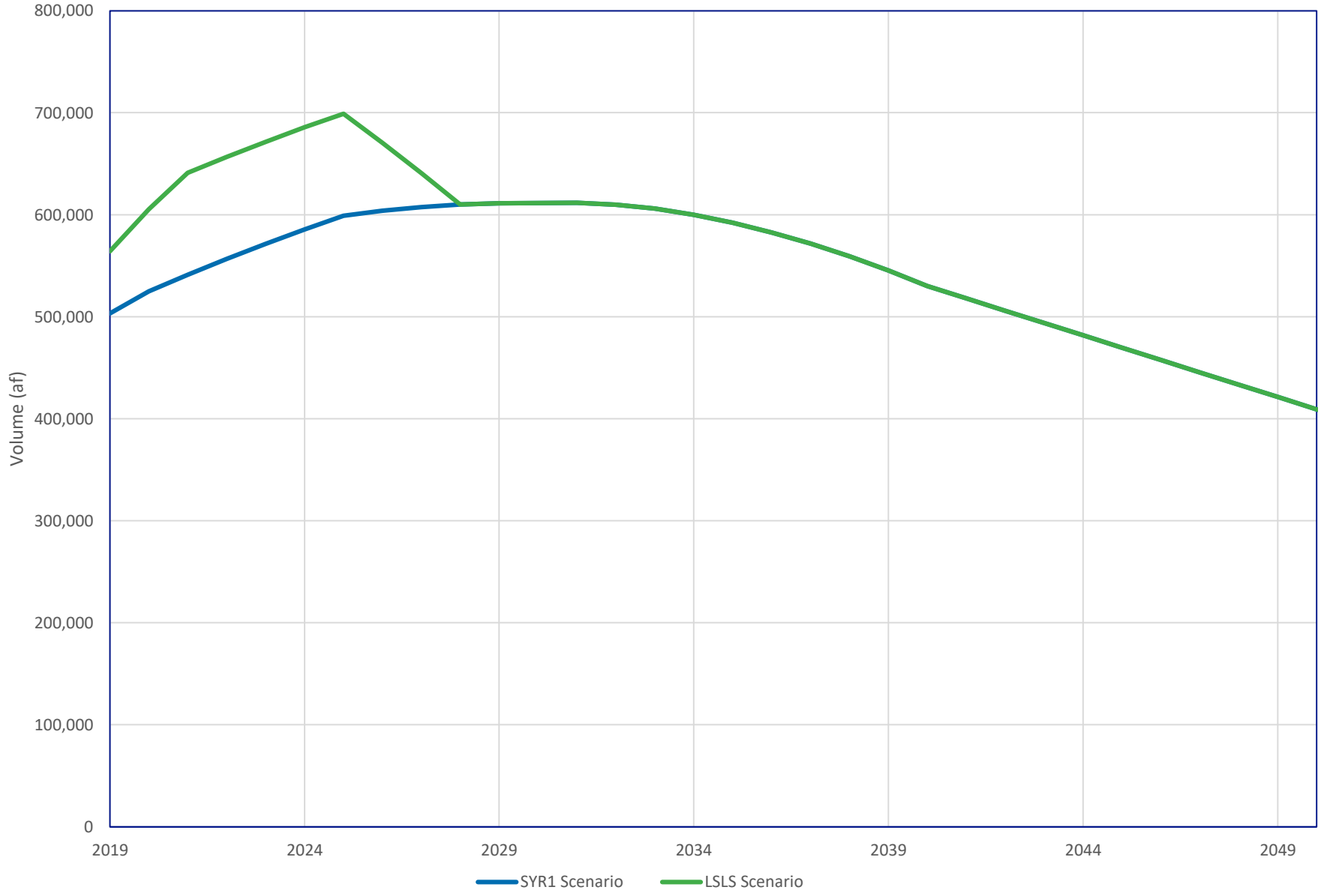


Table 2-2. Allocation of Puts for the LSLS Scenario	
Category	Amount, afy
In-Lieu Recharge	
City of Chino	343
City of Ontario	2,391
City of Pomona	592
City of Upland	889
Cucamonga Valley Water District	3,953
Monte Vista Water District	1,602
Total	**9,770**
Wet-Water Recharge	
Monte Vista Water District ASR Wells	2,740
Montclair Basins (1-4)	5,700
Upland Basin	1,330
Total	**9,770**

2.3 Operating Assumptions for Takes

All takes for the LSLS scenario are based on the IEUA's and the Appropriative Pool parties' contractual obligations for the DYYP. The LSLS scenario assumes maximum annual takes of 33,333 afy, consistent with the takes specified in the DYYP contract. Table 2-3 below shows the allocation of takes by Appropriative Pool party. All takes are assumed to occur through the respective parties' existing facilities.

Table 2-3. Allocation of Takes by Appropriative Pool Party for the LSLS scenario	
Appropriative Pool Party	Additional Pumping for Take, afy
City of Chino Hills	1,463
City of Ontario	8,158
City of Pomona	1,402
City of Upland	3,031
Cucamonga Valley Water District	11,468
Fontana Water Company	2,638
Monte Vista Water District	5,174
Total	**33,333**

This section describes the impacts to the basin and the parties from the implementation of the LSLS scenario. Evaluated impacts include changes in net recharge, managed storage, groundwater levels, pumping sustainability, new land subsidence, state of Hydraulic Control, and changes in the speed and direction of significant contaminant plumes.

3.0 RESULTS

3.1 Net Recharge and Managed Storage

Table 3-1 compares the changes in net recharge and managed storage for the LSLS scenario to the SYR1 scenario. These comparisons are described in the following sections.

Table 3-1. Comparison of Results between SYR1 and the LSLS scenario

Category	SYR1	LSLS	LSLS minus SYR1
Average Net Recharge, afy			
2021-2030	130,600	129,800	-800
2031-2040	138,200	138,500	300
2040-2050	143,100	143,600	500
End-of-Year Volume in Managed Storage, afy			
2028	610,000	604,000	-6,000
2038	559,000	554,000	-5,000
2048	433,000	440,000	7,000

3.1.1 Net Recharge

Net recharge, as used herein, is the exploitable inflow to a groundwater basin over a specified period, either under historical conditions or in a future projection under prescribed operating conditions, and it is a result of the hydrology, cultural conditions, and water management practices of the time period. Net recharge is equal to recharge minus uncontrolled discharge and excludes the recharge of supplemental water Algebraically:

$$Net\ recharge = \Delta S/\Delta t + O_p - I_{ar}$$

Where ΔS is change in storage over a base period, Δt is the duration of a base period and O_p and I_{ar} are the average groundwater pumping and average supplemental water recharge over the base period, respectively. Figure 3-1 shows the time series of net recharge for the SYR1 and the LSLS scenarios for the period 2019 through 2050. The net recharge for the LSLS scenario is less than the SYR1 scenario for 2019 through 2032 due to the temporary increase in managed storage in the LSLS. This reduction in net recharge averages about 800 afy for the period of 2021 through 2030 as shown in Table 3-1, and averages about 600 afy for the period of 2019 through 2032.

After the three years of DYYP takes prior to and ending in 2028, the balance in the DYYP storage accounts is zero. Since no activities related to storage and recovery programs were assumed to occur under the SYR1 scenario, the DYYP storage accounts remain at 41,380 af less than the baseline condition. Therefore, the exercise of the LSLS results in 41,380 af more water being pumped from the basin compared to the SYR1 scenario. This results in an increase in net recharge after 2032 in the LSLS scenario compared to the SYR1 scenario. The cumulative reduction in net recharge for the LSLS scenario before 2032 is projected to be completely offset by 2050. By 2050, the net recharge in the LSLS scenario is greater than the SYR1 scenario by about 500 afy.

The temporary reduction in net recharge through 2032 is an adverse economic impact. The Safe Yield, a prospective calculation, is based on projected estimates of net recharge that include the effects of managed storage on net recharge. The reduction in Safe Yield due to projected storage management by the Parties is thus incorporated into the Safe Yield estimate. Watermaster considers this adverse economic impact to be mitigable by the prospective calculation of the Safe Yield.

3.1.2 Managed Storage

The changes in net recharge shown in Figure 3-1 affect the Safe Yield, which will affect future pumping rights in the Chino Basin. Based on the projected net recharge and the updated Safe Yield computed for the LSLS scenario, the end-of-year managed storage was recalculated. Figure 3-2 shows the model-projected, end-of-year managed storage for the SYR1 and LSLS scenarios for the period of July 1, 2018 through June 30, 2050. At the end of the DYYP operational cycle in the LSLS scenario, the managed storage is lower than the SYR1 scenario by about 6,000 af. Due to the higher net recharge after 2032, the LSLS scenario results in a net increase of 9,000 af in managed storage compared to the SYR1 scenario by 2050. These projected changes in managed storage are small, ranging from a one percent decrease to a two percent increase.

3.2 Groundwater Elevation Projections

Figure 3-3 and Figure 3-4 show the differences in groundwater levels between the LSLS scenario and the SYR1 scenario in 2028 and 2038, coinciding with the end of the operational cycle and 10 years after the operational cycle ends. In Figure 3-3, groundwater levels remain unchanged across the southern part the basin and decline in the northern part of the basin. Groundwater levels in northwest MZ-1 and northeastern MZ-2 are projected to decline by greater than 10 feet compared to the SYR1 scenario. This pattern of groundwater level changes results from the asymmetric puts and takes assumed in the LSLS scenario and the depletion of the DYYP storage account compared to the SYR1 scenario. These declines in groundwater levels could be mitigated by optimization the location and magnitude of the puts and takes within management zones.

After 2028, the groundwater levels in the LSLS scenario begin to rebound, approaching the baseline condition in the SYR1 scenario. By 2034, there are no locations in the basin that show groundwater level declines of greater than five feet for the LSLS scenario compared to the SYR1 scenario. By 2038, Figure 3-9 there is no noticeable projected change in water levels across the basin.

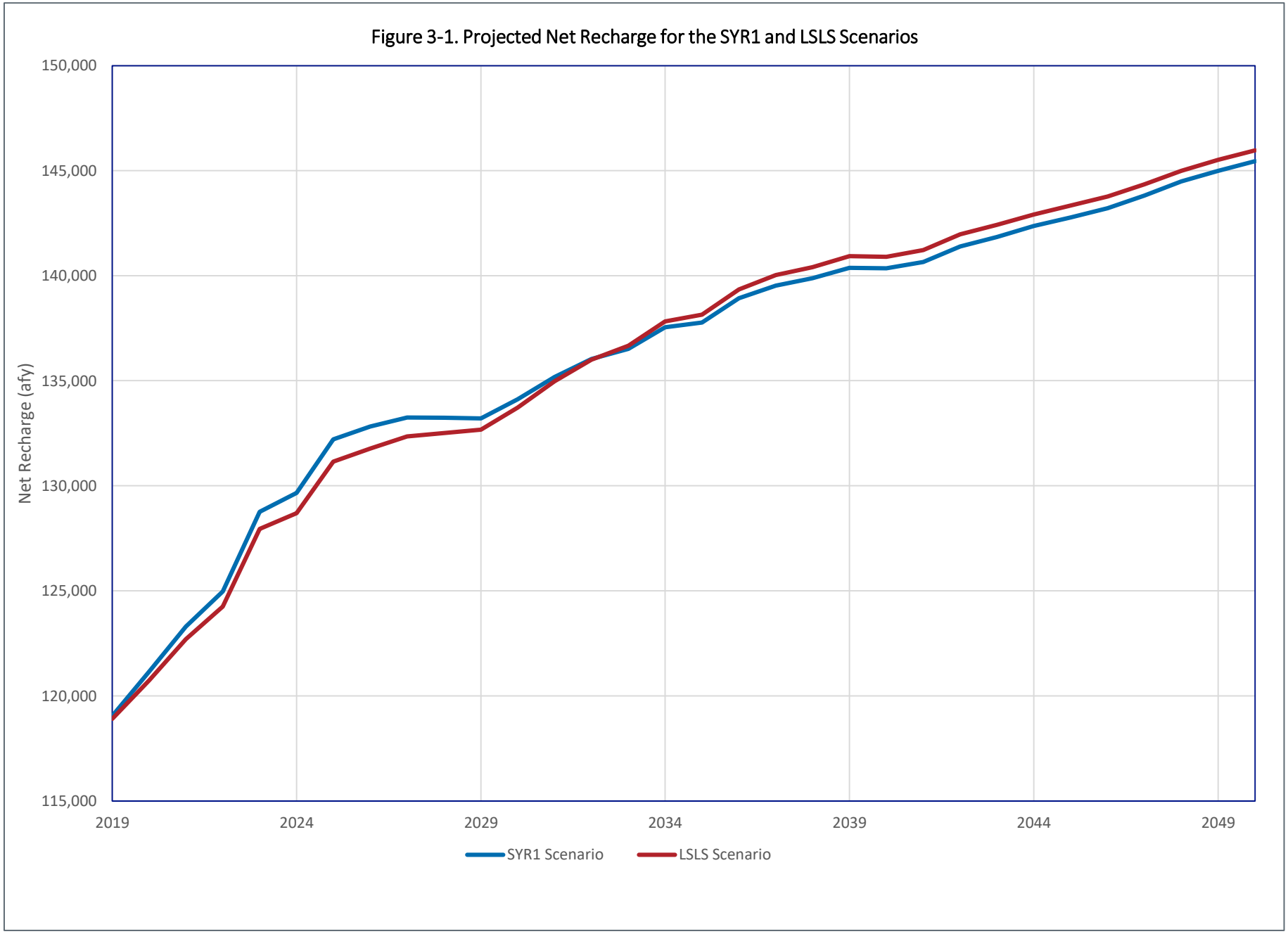
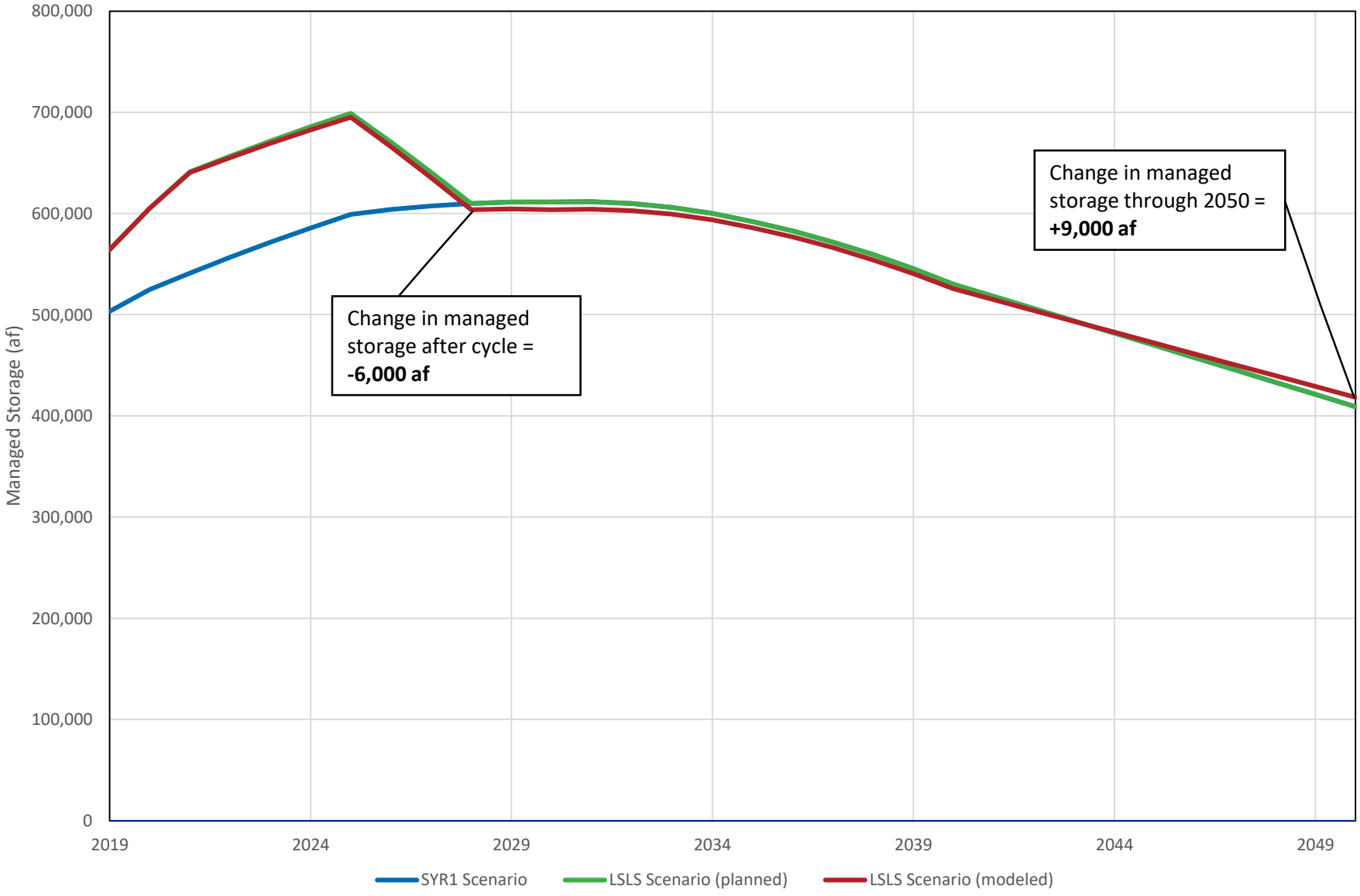
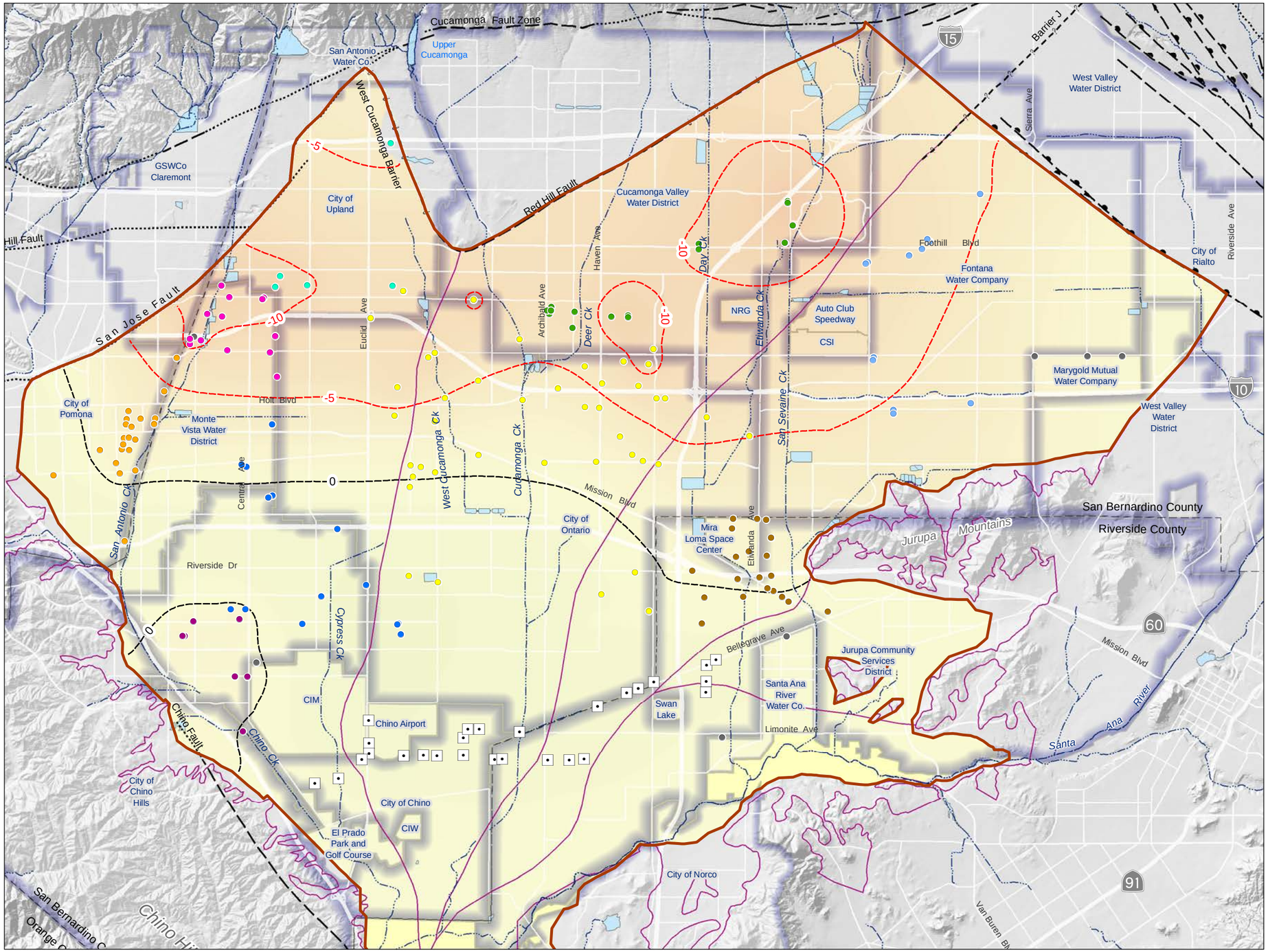


Figure 3-1. Projected Net Recharge for the SYR1 and LSLS Scenarios
150,000
145,000
140,000
135,000
130,000
125,000
120,000
115,000
Net Recharge (afy)
2019
2024
2029
2034
2039
2044
2049
SYR1 Scenario
LSLS Scenario

Figure 3-2. Model-Projected End-of-Year Volume in Managed Storage for the SYR1 and LSLS Scenarios





Contour of Groundwater Elevation Change (ft)
Positive Change *July 2028 - LSLS minus SYR1*

Contour of Groundwater Elevation Change (ft)
Negative Change *July 2028 - LSLS minus SYR1*

Groundwater Elevation Change (ft)
July 2028 - LSLS minus SYR1

50 — Increase
0
-50 — Decrease

Appropriative Pool Pumping Wells

- City of Chino
- City of Chino Hills
- City of Ontario
- City of Pomona
- City of Upland
- Cucamonga Valley Water District
- Fontana Water Company
- Jurupa Community Services District
- Monte Vista Water District
- Other Appropriators

Chino Desalter Wells

Streams & Flood Control Channels

Flood Control & Conservation Basins

Water Service Area

Chino Basin Part of the Active CVM MODFLOW Domain

OBMP Management Zones

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Author: TA
Date: 2/4/2021
File: Figure 3-3 GWE Change 2028.mxd

0 1 2 3 4 5 Miles
0 2 4 6 8 Km

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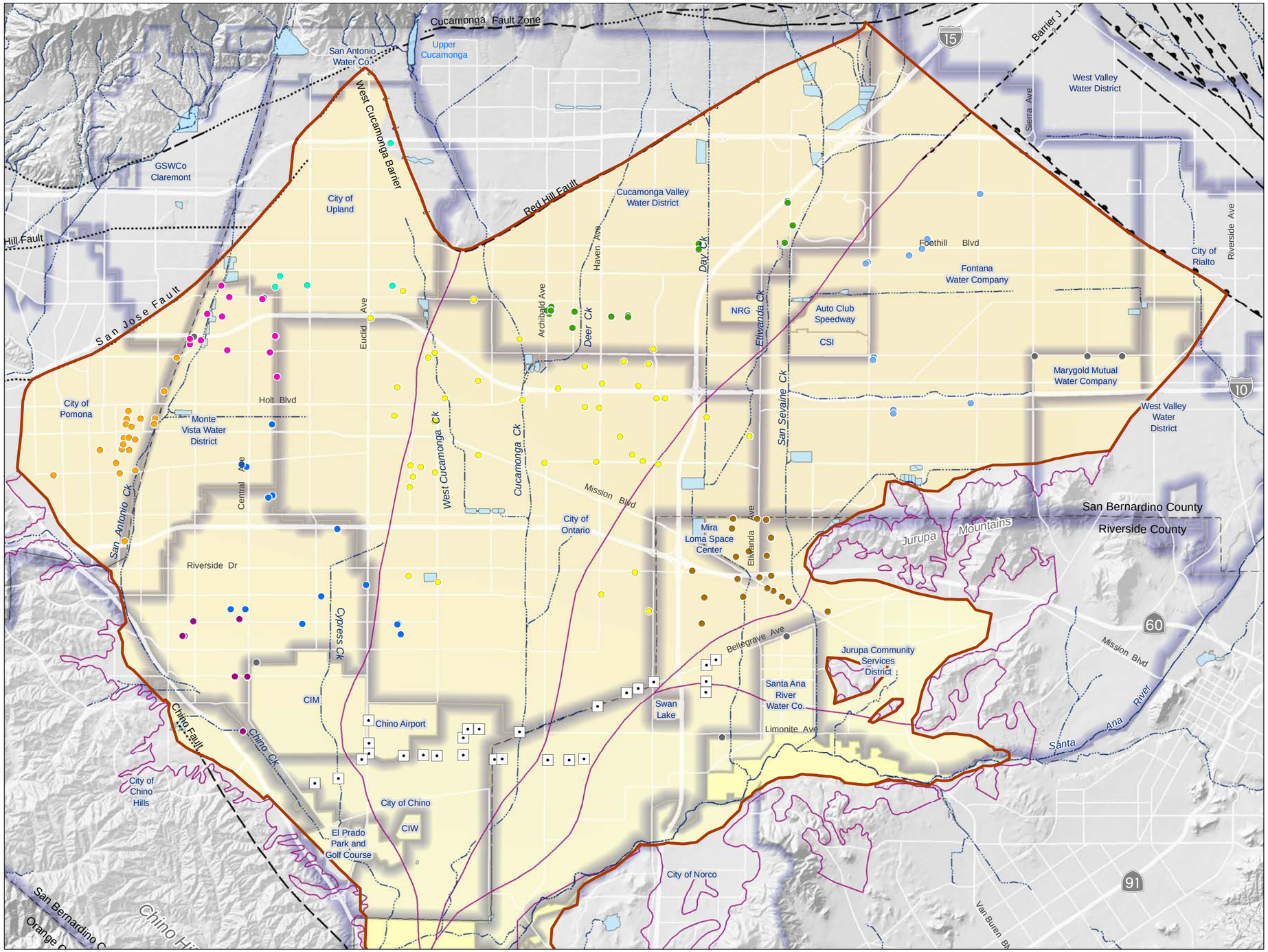
CHINO BASIN WATERMASTER — Partners in Basin Management

Projected Groundwater Elevation Change
Layer 1
July 2028 - LSLS minus SYR1

Figure 3-3



Contour of Groundwater Elevation Change (ft)
Positive Change *July 2038 - LSLS minus SYR1*

Contour of Groundwater Elevation Change (ft)
Negative Change *July 2038 - LSLS minus SYR11*

Groundwater Elevation Change (ft)
July 2038 -LSLS minus SYR1

50 — Increase
0
-50 — Decrease

Appropriative Pool Pumping Wells

- City of Chino
- City of Chino Hills
- City of Ontario
- City of Pomona
- City of Upland
- Cucamonga Valley Water District
- Fontana Water Company
- Jurupa Community Services District
- Monte Vista Water District
- Other Appropriators

Chino Desalter Wells

Streams & Flood Control Channels

Flood Control & Conservation Basins

Water Service Area

Chino Basin Part of the Active CVM MODFLOW Domain

OBMP Management Zones

Prepared by:

WEST YOST

Author: TA
Date: 2/4/2021
File: Figure 3-4 GWE Change 2038.mxd

0 1 2 3 4 5 Miles
0 2 4 6 8 Km

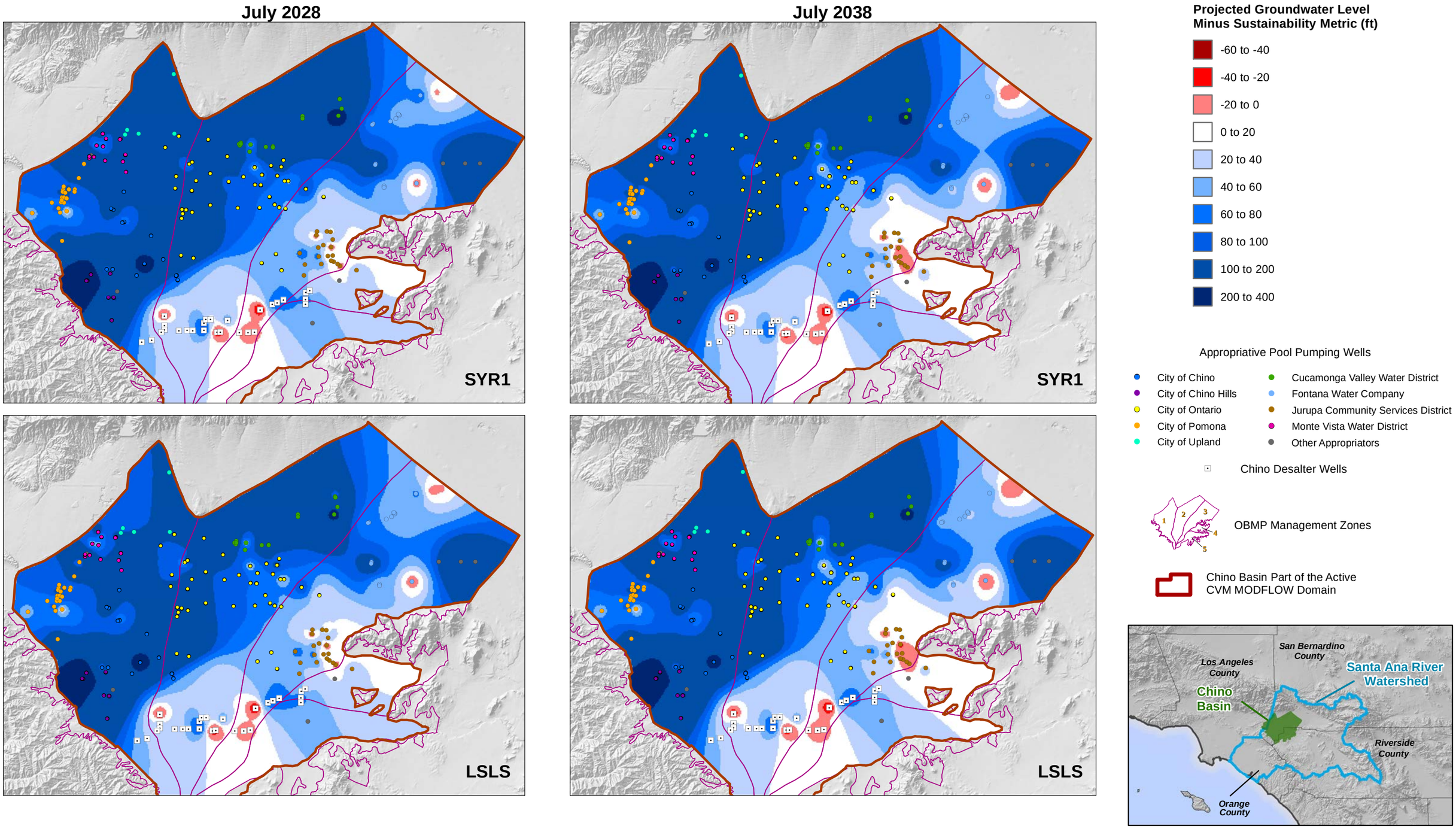
Prepared for:

Evaluation of the Local Storage Limitation Solution

CHINO BASIN WATERMASTER
Partners in Basin Management

Projected Groundwater Elevation Change
Layer 1
July 2038 - LSLS minus SYR1

Figure 3-4



Prepared by:

WEST YOST

Author: LS
Date: 2/9/2021
File: Figure 3-5 Quad Pumping Sustainability Metric.mxd

0 1 2 3 4 5 Miles
0 2 4 6 8 Km

Prepared for:

Evaluation of the Local Storage Limitation Solution

Projected Groundwater Elevation in Chino Basin Compared to Pumping Sustainability Metric

SYR1 and LSLS Scenarios

Figure 3-5

3.3 Pumping Sustainability

Figure 3-5 shows the projected difference between the groundwater levels and the pumping sustainability metrics at the end of the operating cycle (2028) and ten years after the end of the operating cycle (2038) for the SYR1 and LSLS scenarios. A review of the projected pumping sustainability in the SYR1 scenario (Figure 3-5, top) reveals the following:

- Groundwater levels in the SYR1 scenario are projected to be above the pumping sustainability metric through 2038 over the entire basin except for the JCSD and Chino Desalter well fields and one well in the FWC service area. Groundwater levels at wells in these areas are below the pumping sustainability metric in the initial condition in 2018, and the area with groundwater levels below the pumping sustainability metric does not change significantly through 2038.

A review of the projected pumping sustainability in the LSLS scenario (Figure 3-5, bottom) and comparison to the SYR1 scenario shows no significant change in pumping sustainability through 2038. No Appropriative Pool pumping wells are projected to be impacted that were not projected to have pumping sustainability challenges in the SYR1 scenario. No MPI related to pumping sustainability is projected to occur in the LSLS scenario.

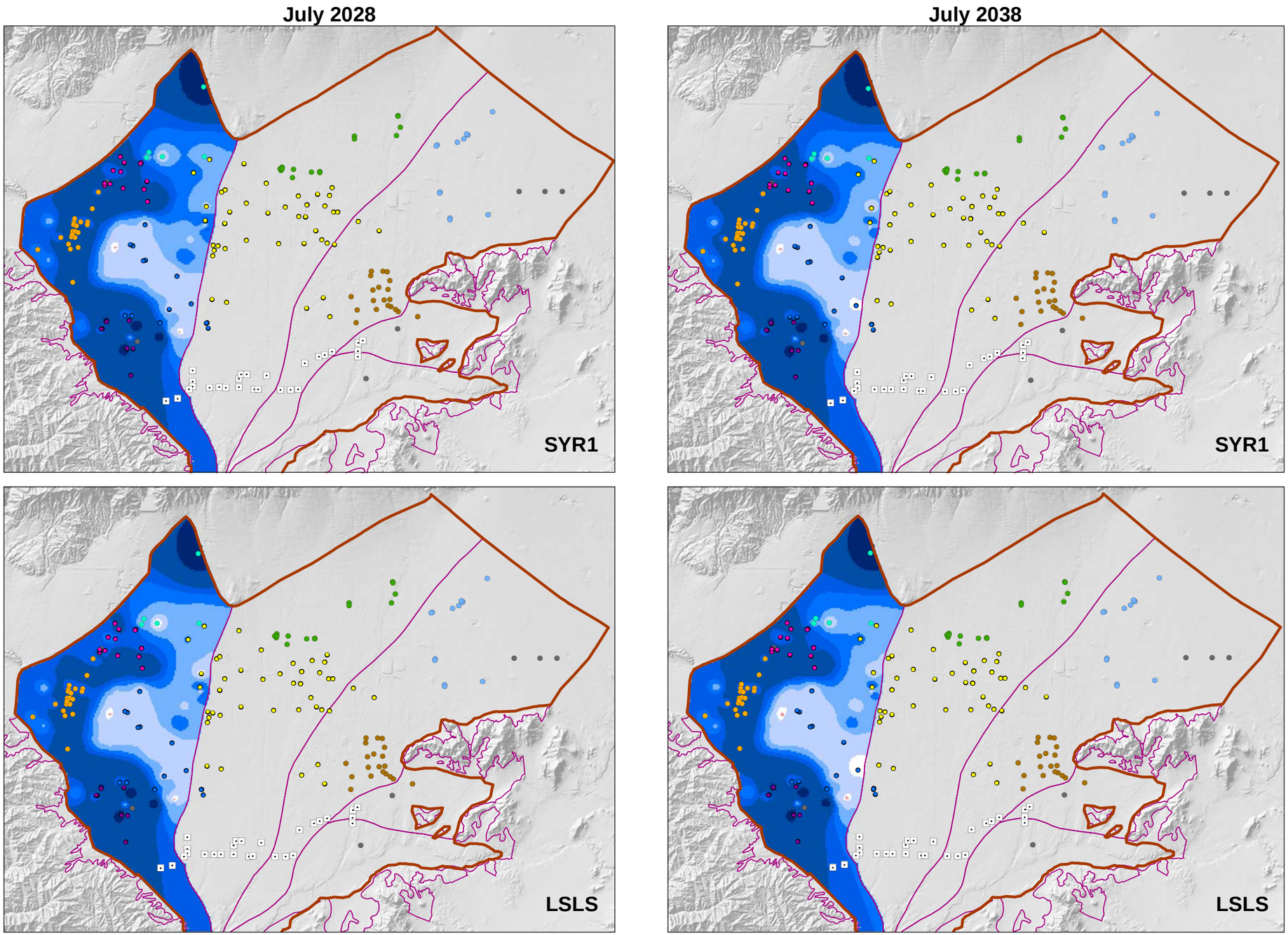
3.4 New Land Subsidence

Figure 3-6 shows the projected difference between the groundwater levels and the new land subsidence metric at the end of the operating cycle (2028, left side) and ten years after the end of the operating cycle (2038, right side) for the SYR1 and LSLS scenarios. A review of the projected new land subsidence in the SYR1 scenario (Figure 3-6, top) indicates that projected groundwater elevations are greater than the preconsolidation stress except for two small areas centered on wells where groundwater pumping can be modified to ensure no new land subsidence.

The projected new land subsidence in the LSLS scenario (Figure 3-6, bottom) looks similar to the patterns in the SYR1 scenario, with no new land subsidence projected to occur in the LSLS scenario. The projected decline in groundwater levels in northern MZ-1 in 2028 under the LSLS scenario (Figure 3-3) is not projected to result in new land subsidence. No MPI related to new land subsidence is projected to occur in the LSLS scenario.

3.5 State of Hydraulic Control

Figure 3-7 shows the time series of the groundwater discharge through the CCWF for the SYR1 and LSLS scenarios and compares them to the de minimus standard of 1,000 afy. The flow through the CCWF increases in the LSLS scenario by up to 25 afy compared to the SYR1 due to the increased storage in MZ-1 during the operational cycle. After 2032, the flow through the CCWF is less under the LSLS scenario compared to the SYR1 scenario. The maximum projected flow through the CCWF in both the SYR1 and LSLS scenarios is about 520 afy, which is below the de minimus standard. Hydraulic Control is projected to be maintained through 2050 in the LSLS scenario. Therefore, the LSLS scenario is not projected to cause adverse impacts related to Hydraulic Control.



Projected Groundwater Level Minus Subsidence Metric (ft)

- -60 to -40
- -40 to -20
- -20 to 0
- 0 to 20
- 20 to 40
- 40 to 60
- 60 to 80
- 80 to 100
- 100 to 200
- 200 to 400

Appropriative Pool Pumping Wells

- City of Chino
- City of Chino Hills
- City of Ontario
- City of Pomona
- City of Upland
- Cucamonga Valley Water District
- Fontana Water Company
- Jurupa Community Services District
- Monte Vista Water District
- Other Appropriators

Chino Desalter Wells

OBMP Management Zones

Chino Basin Part of the Active CVM MODFLOW Domain

Prepared by:

WEST YOST

Author: LS
Date: 2/9/2021
File: Figure 3-6 Quad Subsidence Sustainability Metric.mxd

0 1 2 3 4 5 Miles
0 2 4 6 8 Km

Prepared for:

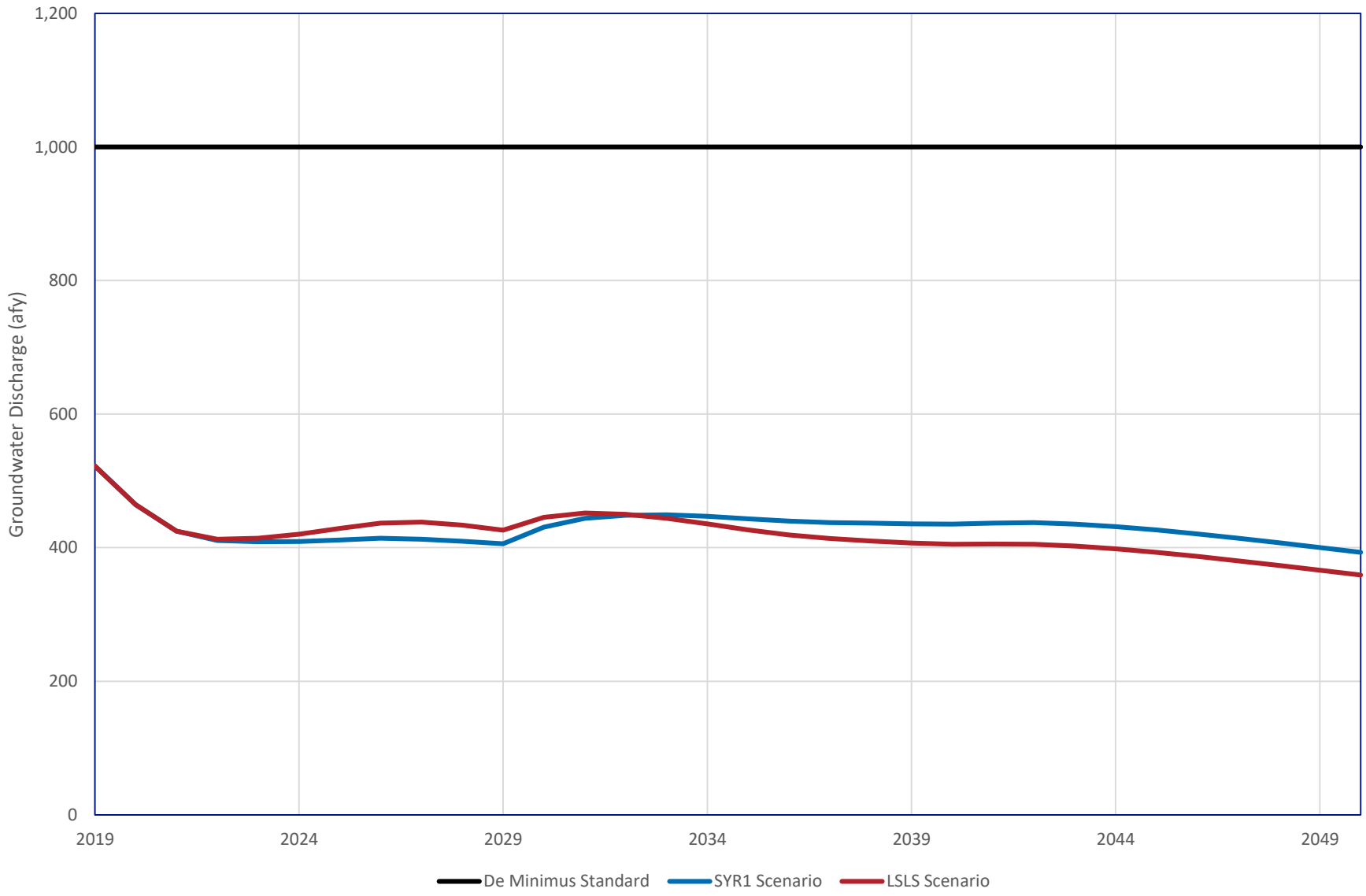
Evaluation of the Local Storage Limitation Solution

CHINO BASIN WATERMASTER
Partners in Basin Management

Projected Groundwater Elevation in MZ1 Compared to Subsidence Metric
SYR1 and LSLS Scenarios

Figure 3-6

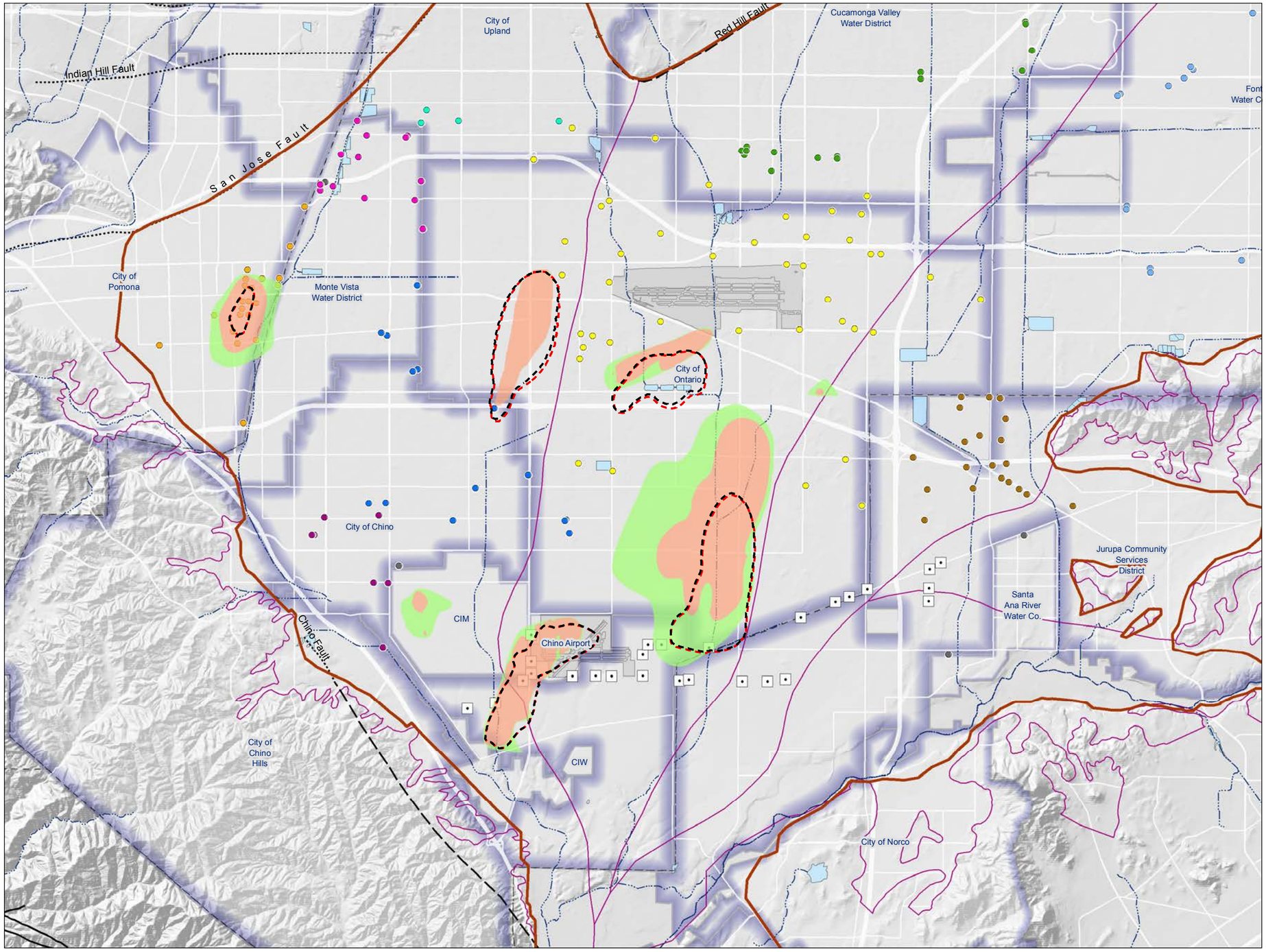
Figure 3-7. Projected Groundwater Discharge from Chino North Management Zone through the Chino Creek Well Field for the SYR1 and LSLS Scenarios



3.6 Movement of Water Quality Anomalies

Figures 3-8 and Figure 3-9 show the initial locations of seven VOC plumes in the Chino Basin and their projected locations in 2028 and 2038, respectively, as a result of the SYR1 and LSLS scenarios. These plumes have been described in recent Chino Basin Watermaster reports (WEI, 2018; WEI, 2019). By 2028 (Figure 3-8), the VOC concentrations of two of the plumes (CIM and Milliken Landfill) are projected to be less than 5 µg/L for both scenarios. The projected locations of the Pomona and Chino Airport plumes in 2028 are identical between the SYR1 and LSLS scenarios. The LSLS scenario is projected to displace the southern (downgradient) boundaries of the GE Flat Iron and GE Test Cell plumes further south by less than 400 feet compared to the SYR1 scenario.

By 2038 (Figure 3-9), the projected locations of the Pomona, Chino Airport, and South Archibald plumes are identical between the SYR1 and LSLS scenarios. The LSLS scenario is projected to displace the southern (downgradient) boundaries of the GE Flat Iron and GE Test Cell plumes further south by 200 feet or less compared to the SYR1 scenario. These plume displacements due to the LSLS scenario are minor compared to the magnitude of the baseline projected movement of the plumes. The LSLS scenario is not projected to result in any plume impacting a well operated by an Appropriative Pool party that is not already projected to be impacted under the SYR1 scenario. Therefore, these displacements are negligible and are not potential MPI.



Estimated Initial TCE Concentration (µg/L)

- 0.01 to 5
- > 5

Projected Boundary of TCE Plume in July 2028

- SYR1 (TCE > 5 µg/L)
- Scenario LSLS (TCE > 5 µg/L)

Appropriative Pool Pumping Wells

- City of Chino
- City of Chino Hills
- City of Ontario
- City of Pomona
- City of Upland
- Cucamonga Valley Water District
- Fontana Water Company
- Jurupa Community Services District
- Monte Vista Water District
- Other Appropriators

Chino Desalter Wells

Streams & Flood Control Channels

Flood Control & Conservation Basins

Water Service Area

Chino Basin Part of the Active CVM MODFLOW Domain

OBMP Management Zones

Prepared by:

WEST YOST

Author: LS
Date: 2/12/2021
File: Figure 3-8_3-9 WQ_Anomalies_2028_2038.mxd

0 1 2 3 Miles
0 1 2 3 4 Km

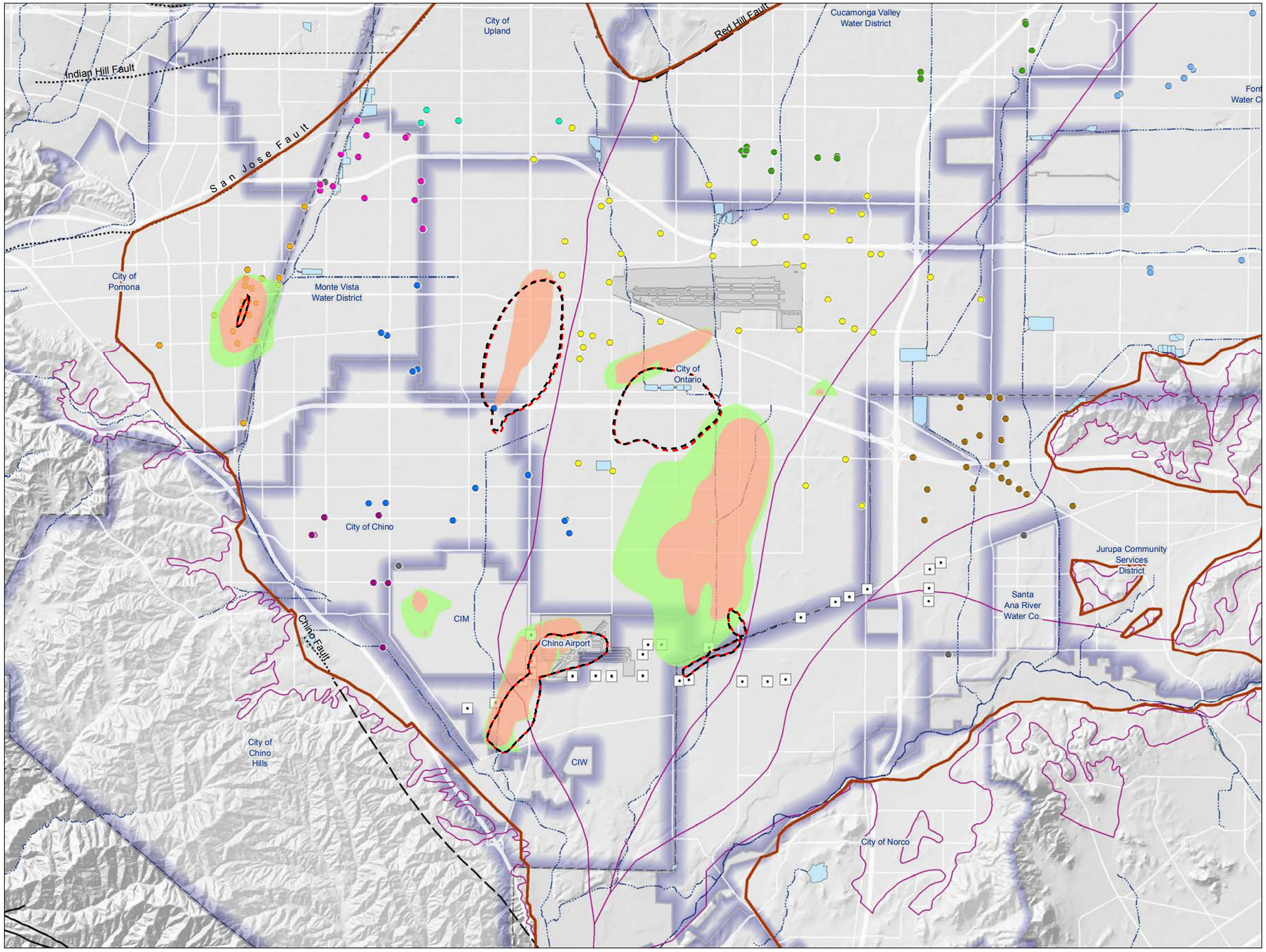
Prepared for:

Evaluation of the Local Storage Limitation Solution

CHINO BASIN WATERMASTER
Partners in Basin Management

Estimated Location of Water Quality Anomalies, SYR1 and LSLS Scenarios
July 2028

Figure 3-8



Estimated Initial TCE Concentration (µg/L)

- 0.01 to 5
- > 5

Projected Boundary of TCE Plume in July 2038

- SYR1 (TCE > 5 µg/L)
- Scenario LSLS (TCE > 5 µg/L)

Appropriative Pool Pumping Wells

- City of Chino
- City of Chino Hills
- City of Ontario
- City of Pomona
- City of Upland
- Cucamonga Valley Water District
- Fontana Water Company
- Jurupa Community Services District
- Monte Vista Water District
- Other Appropriators

Chino Desalter Wells

Streams & Flood Control Channels

Flood Control & Conservation Basins

Water Service Area

Chino Basin Part of the Active CVM MODFLOW Domain

OBMP Management Zones

Prepared by:

WEST YOST

Author: LS
Date: 2/4/2021
File: Figure 3-8_3-9 WQ_Anomalies_2028_2038.mxd

0 1 2 3 Miles
0 1 2 3 4 Km

Prepared for:

Evaluation of the Local Storage Limitation Solution

CHINO BASIN WATERMASTER
Partners in Basin Management

Estimated Location of Water Quality Anomalies, SYR1 and LSLS Scenarios
July 2038

Figure 3-9

3.7 Summary of Adverse Impacts and MPI

Table 3-2 below summarizes the impacts to the Chino Basin and the parties from implementation of the LSLS scenario.

Table 3-2. Summary of Potential MPI and Adverse Impacts

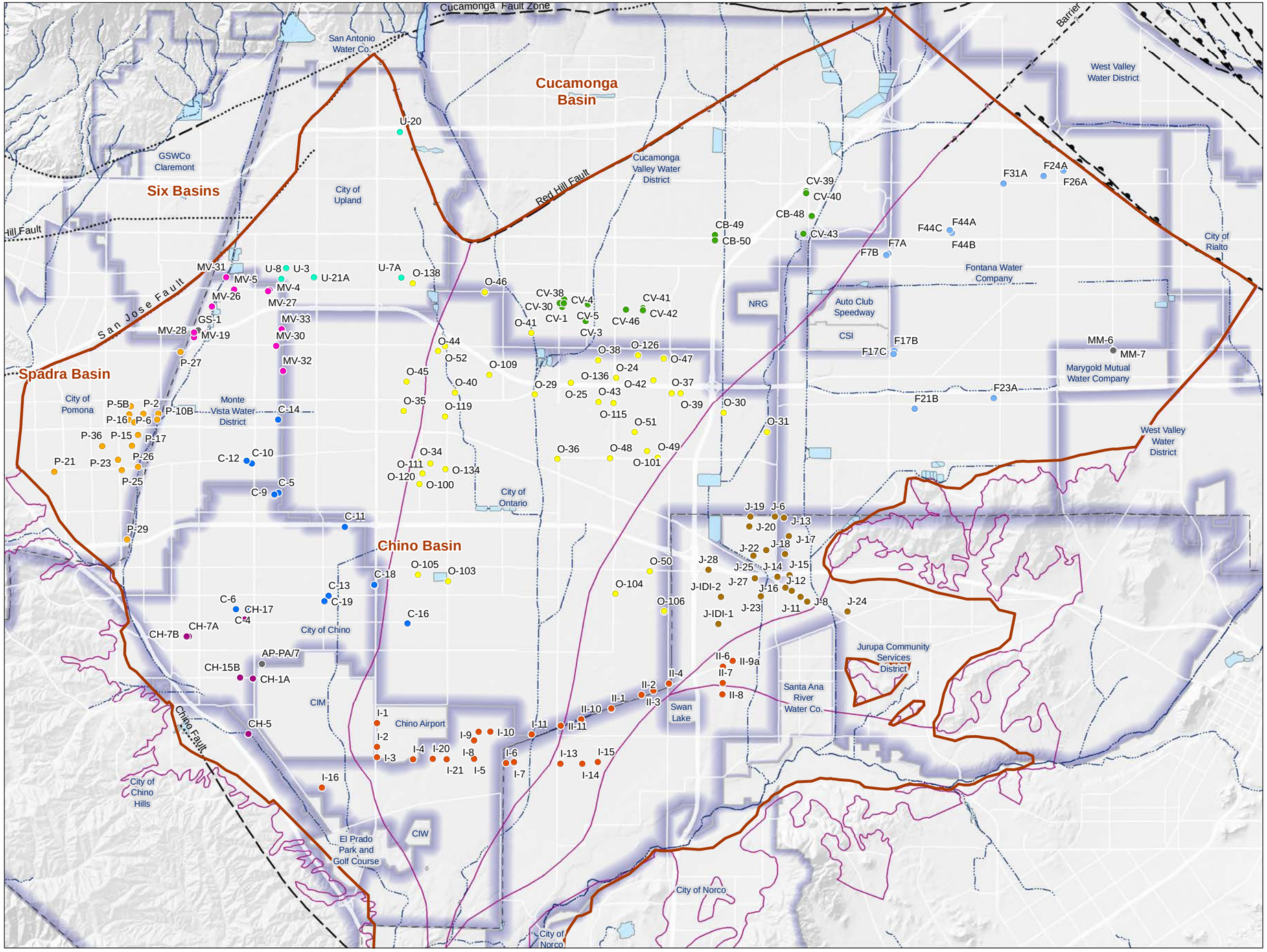
Potential Adverse Impact/MPI Category	Adverse Impacts?[(a)]	Comment
Net recharge and Safe Yield	No: • This is a minor economic impact to the Parties. • This economic impact is offset by the OBMP's prospective calculation of the Safe Yield on a going-forward basis	The LSLS scenario will temporarily reduce net recharge of 600 afy from 2019 through 2032. This is not an environmental impact, but rather an adverse economic impact to the Parties that can be mitigated by the prospective calculation of the Safe Yield under the OBMP. The reduction in net recharge through implementation of the LSLS scenario will diminish over time and is projected to be completely offset by 2050. By 2050, the net recharge in the LSLS scenario increases when compared to the baseline scenario by about 500 afy.
Pumping sustainability	No	No new pumping sustainability challenges are projected to occur
New land subsidence	No	No new land subsidence is projected to occur.
State of Hydraulic Control	No	Hydraulic Control is projected to be maintained through 2035.
Direction and speed of known plumes	No	The LSLS scenario results in a negligible impact on the direction and speed of known plumes.

(a) Will potential adverse impacts or MPI in the LSLS scenario occur through 2035 such that a significant environmental impact would occur?

The groundwater level impacts are spatially varying, and they are evaluated within the impact assessment for new land subsidence and pumping sustainability.

Appendix A

Hydrographs of Projected Groundwater Elevations with Pumping and New Land Subsidence Sustainability Metrics



Groundwater Model Wells

- City of Chino
- City of Chino Hills
- City of Corona
- City of Ontario
- City of Pomona
- City of Upland
- Cucamonga Valley Water District
- Fontana Water Company
- Jurupa Community Services District
- Monte Vista Water District
- CDA
- Other

Streams & Flood Control Channels

Flood Control & Conservation Basins

Water Service Area

Chino Basin Part of the Active CVM MODFLOW Domain

OBMP Management Zones

Faults

- Location Certain
- Location Approximate
- Approximate Location of Groundwater Barrier
- Location Concealed
- Location Uncertain

Prepared by:

WEST YOST

Author: LS
Date: 2/4/2021
File: Figure A-1 Location of Wells with HG.mxd

0 1 2 3 4 5 Miles

0 2 4 6 8 Km

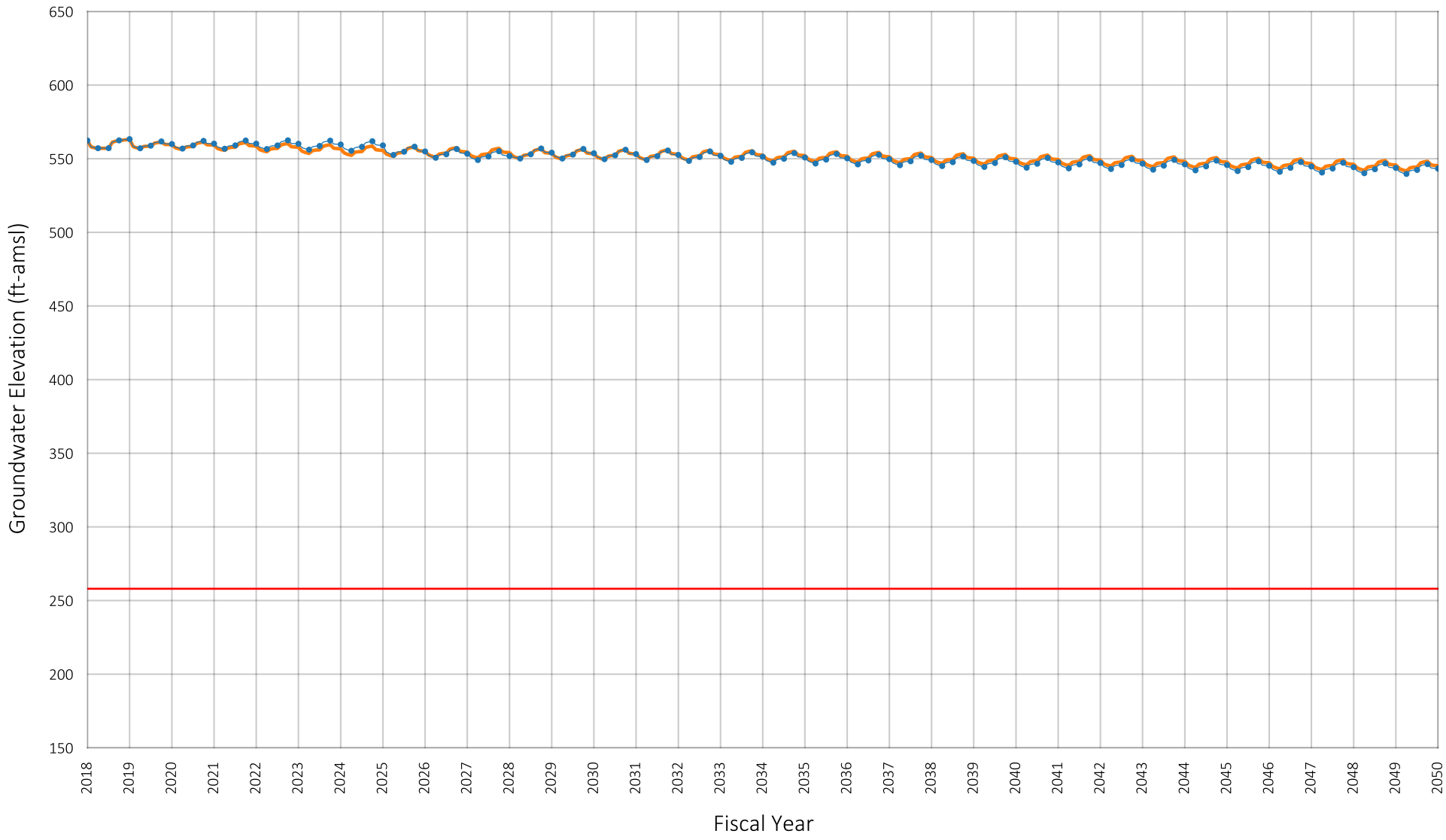
Prepared for:

Evaluation of the Local Storage Limitation Solution

CHINO BASIN WATERMASTER — Partners in Basin Management

Location of Wells with Groundwater Elevation Time Series in Appendix A

Figure A-1



Location of Well in Chino Basin

SYR1

LSLS

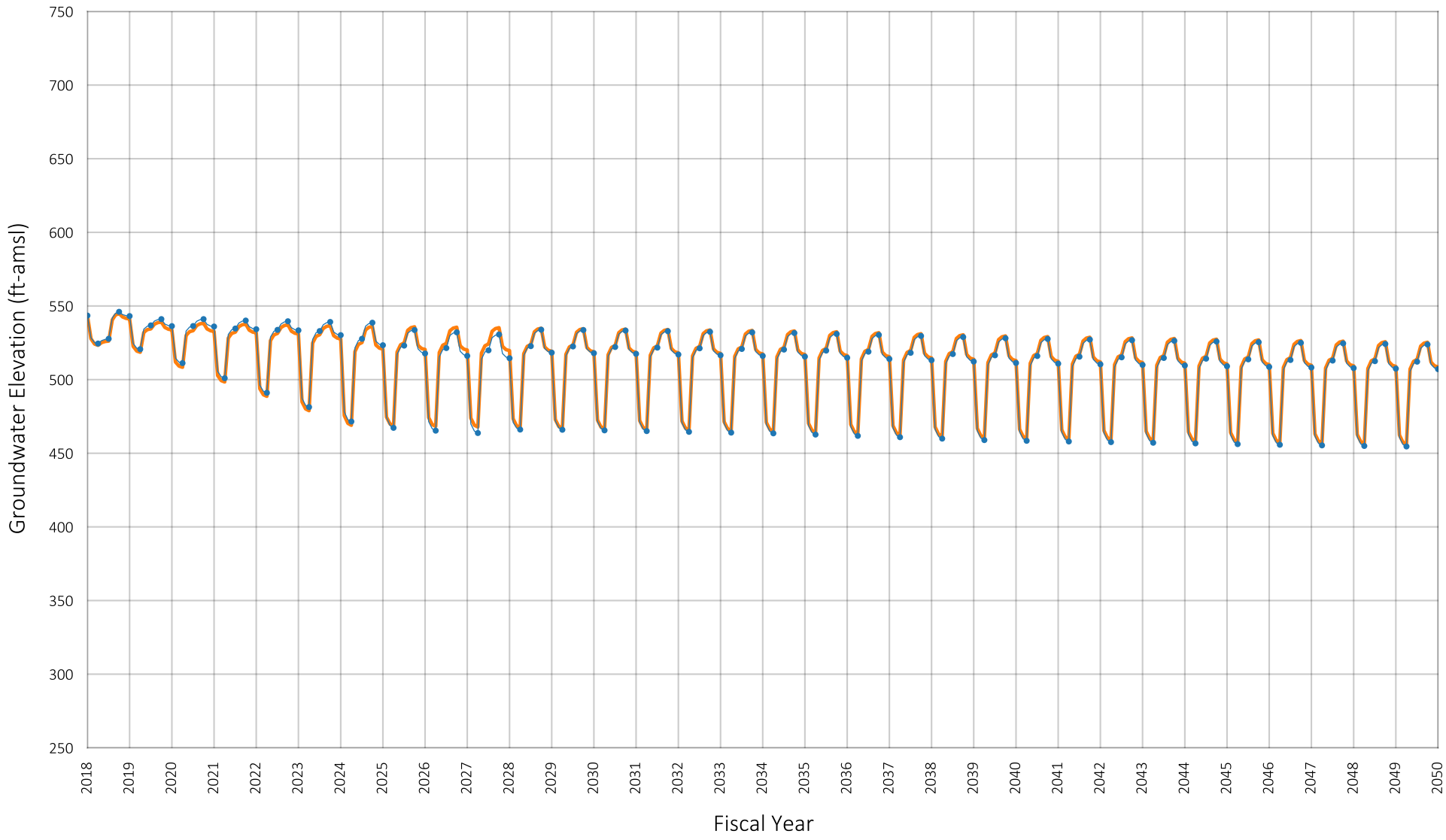
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1004280
Owner: City of Chino Hills
Well Name: 1A

Figure A-2



Location of Well in Chino Basin

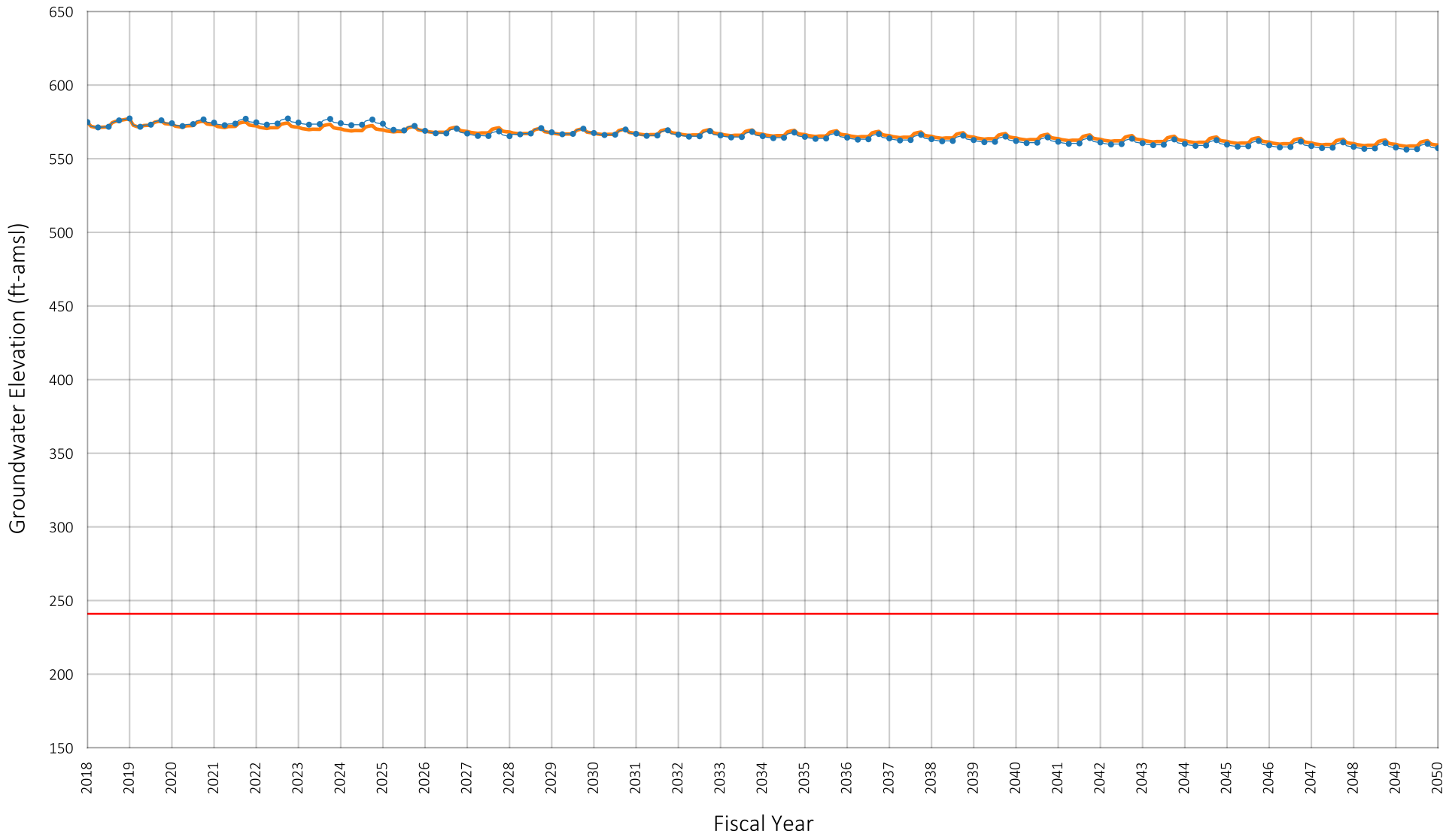
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207336
Owner: City of Chino Hills
Well Name: 5

Figure A-3



Location of Well in Chino Basin

SYR1

LSLS

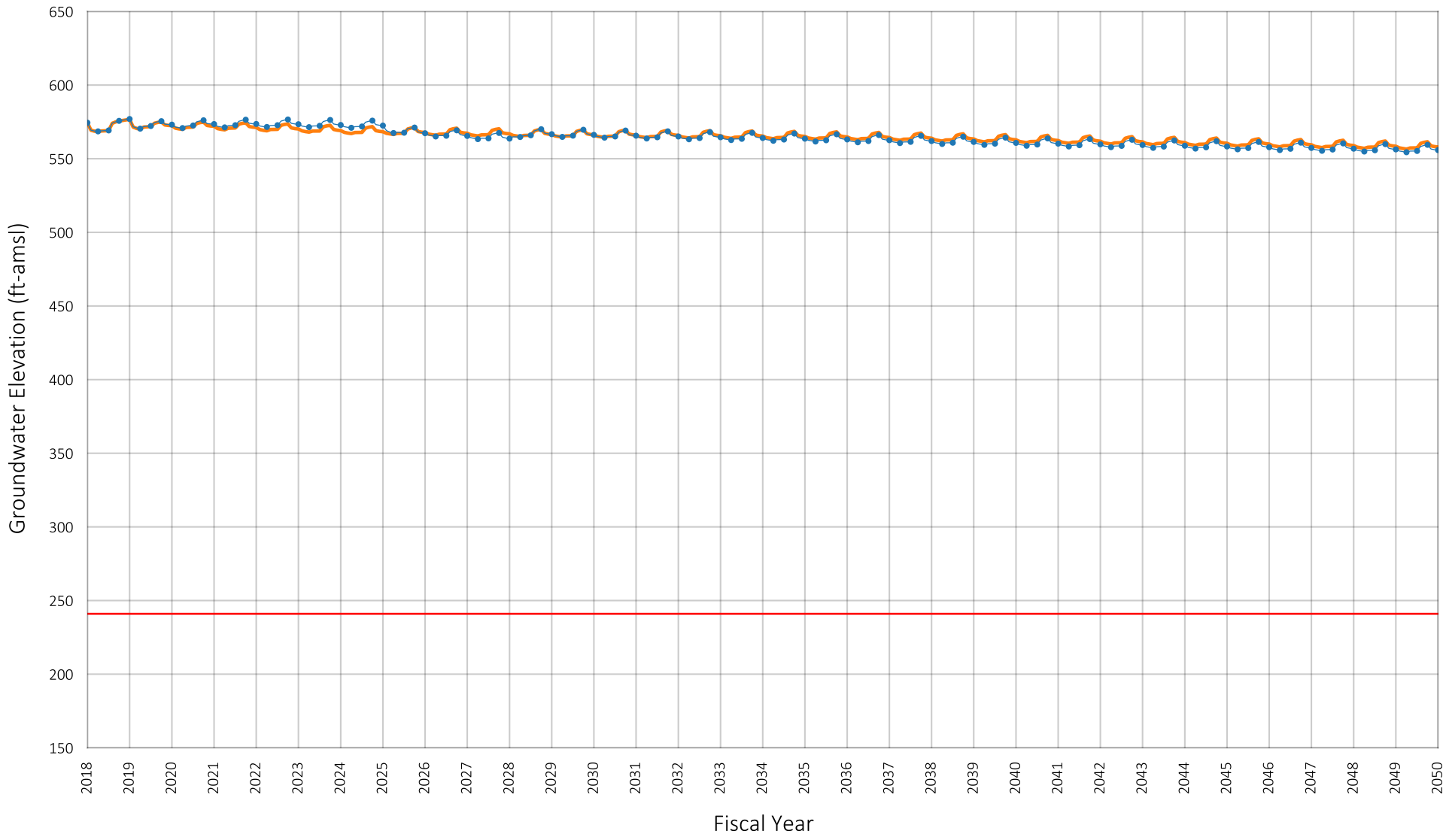
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1004215
Owner: City of Chino Hills
Well Name: 7A

Figure A-4



Location of Well in Chino Basin

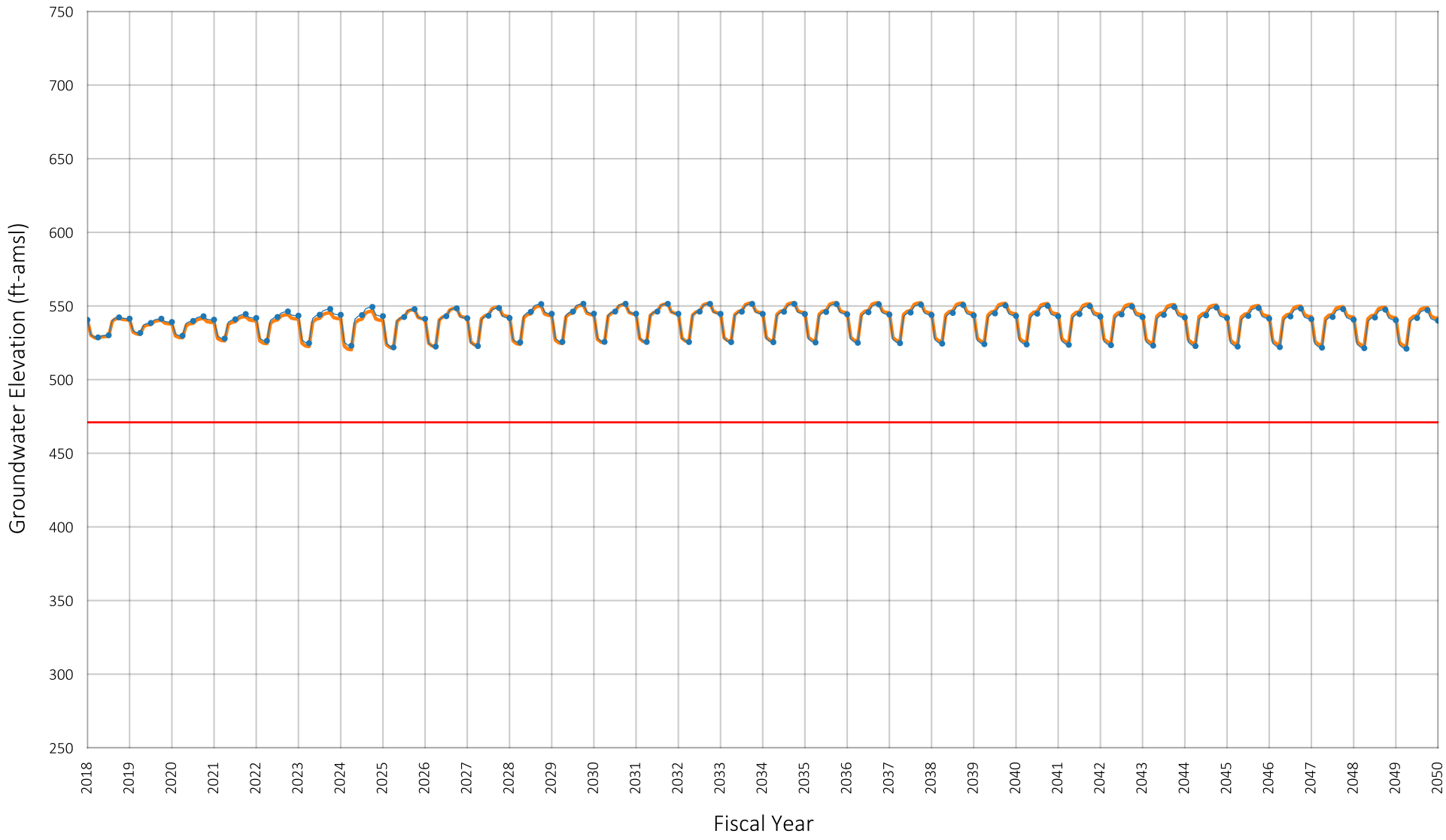
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1004216
Owner: City of Chino Hills
Well Name: 7B

Figure A-5



Location of Well in Chino Basin

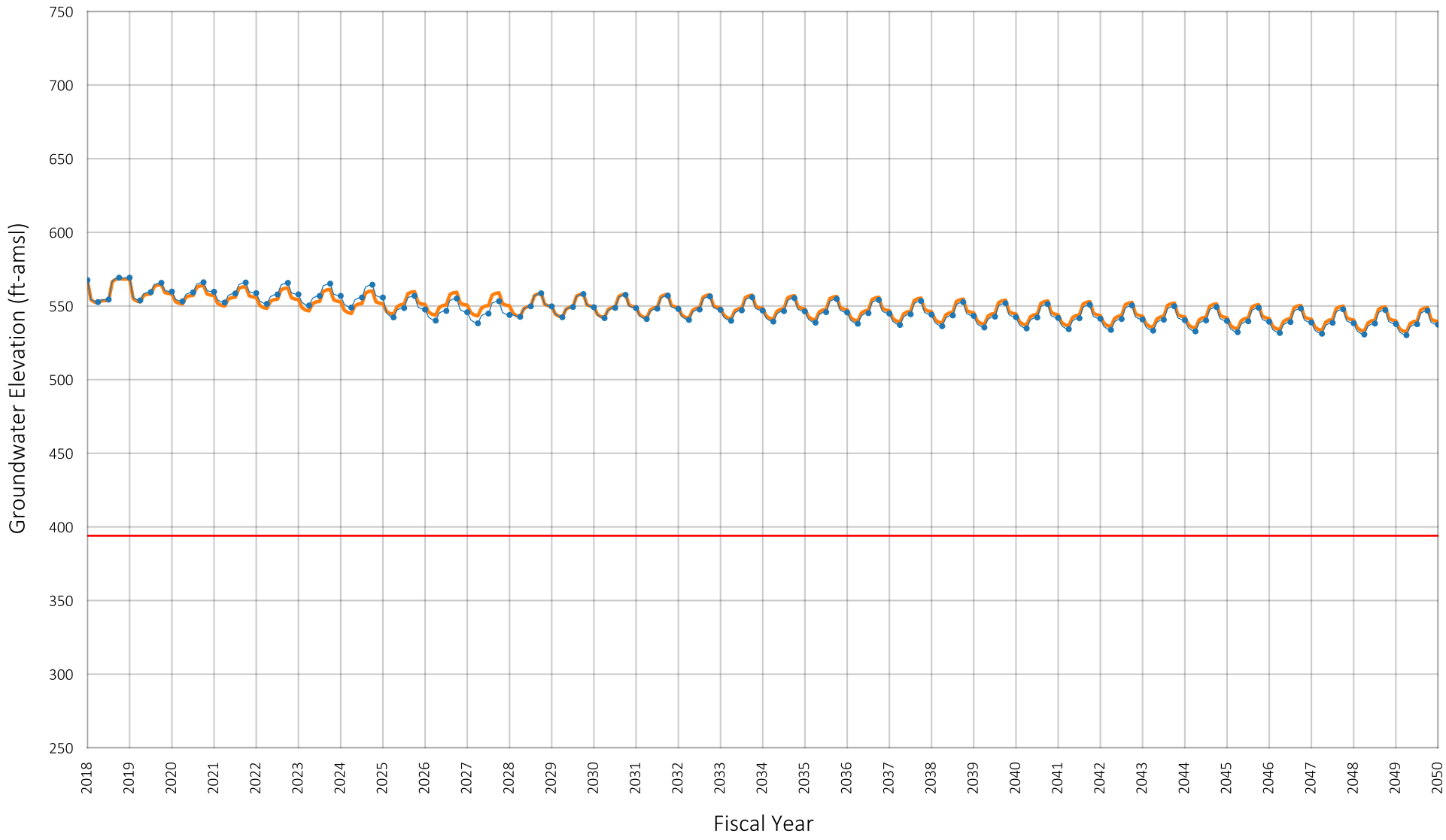
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1203214
Owner: City of Chino Hills
Well Name: 15B

Figure A-6



Location of Well in Chino Basin

SYR1

LSLS

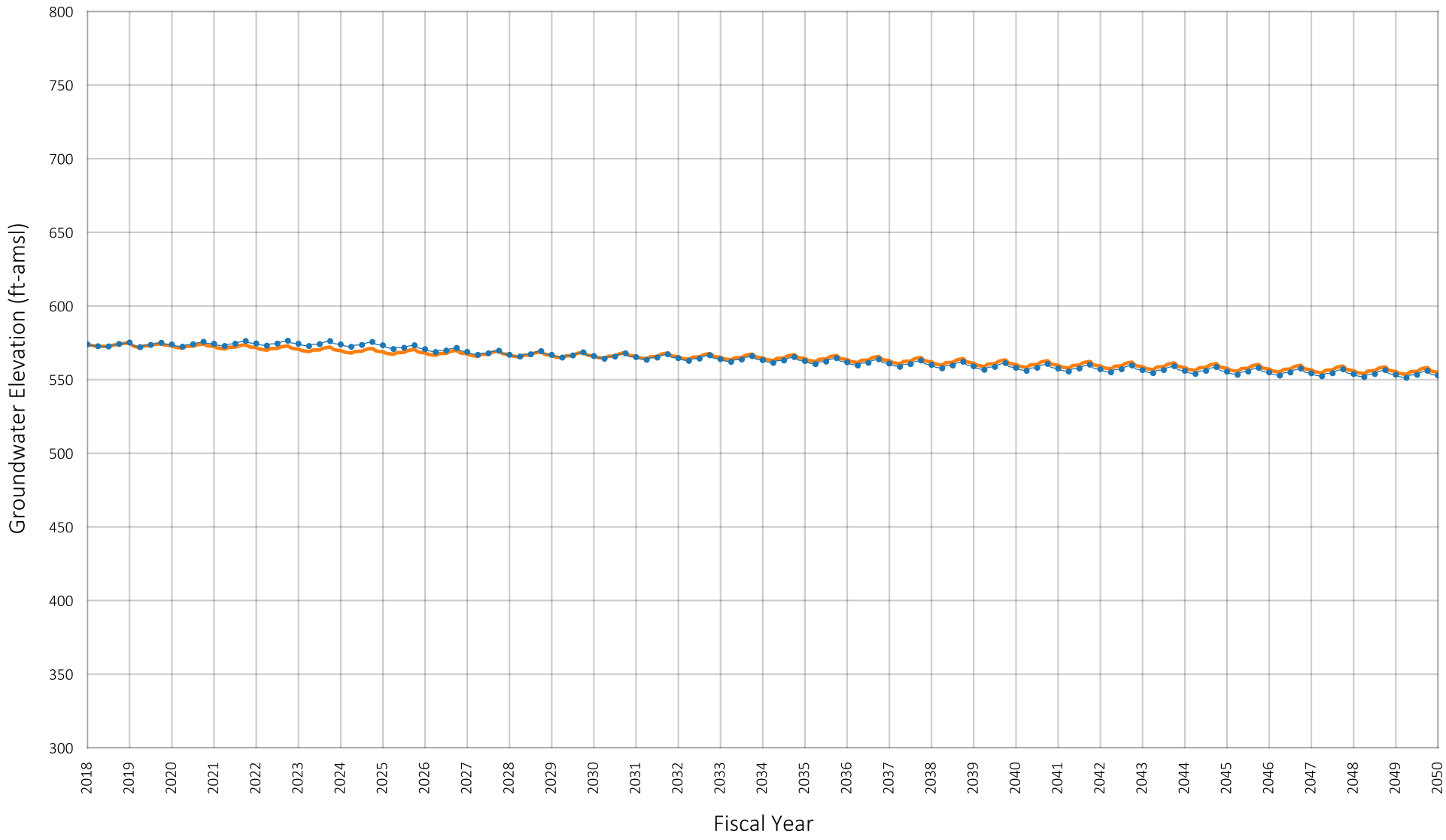
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1004179
Owner: City of Chino Hills
Well Name: 17

Figure A-7



Location of Well in Chino Basin

SYR1

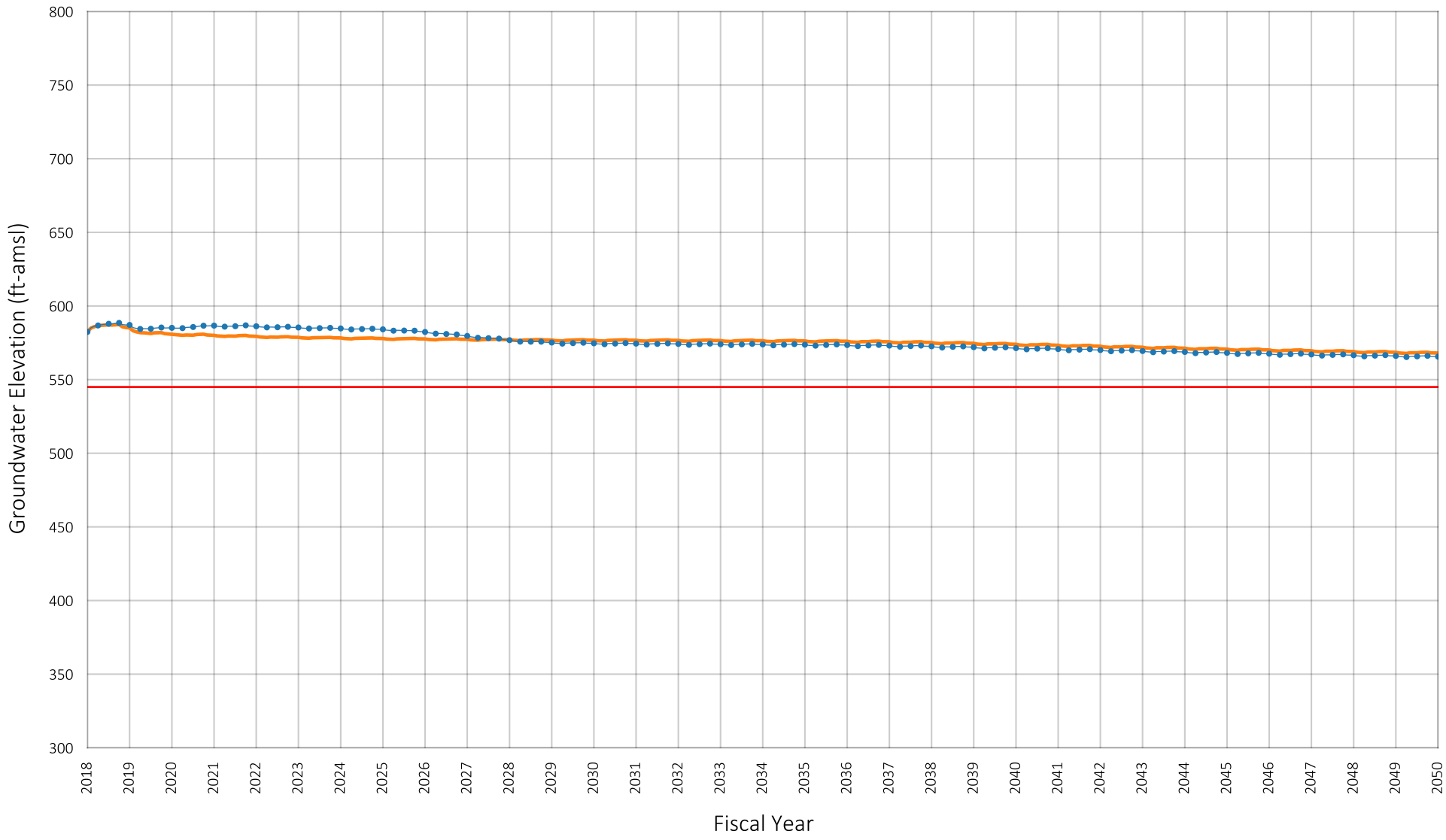
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1004178
Owner: City of Chino
Well Name: 4

Figure A-8



Location of Well in Chino Basin

SYR1

LSLS

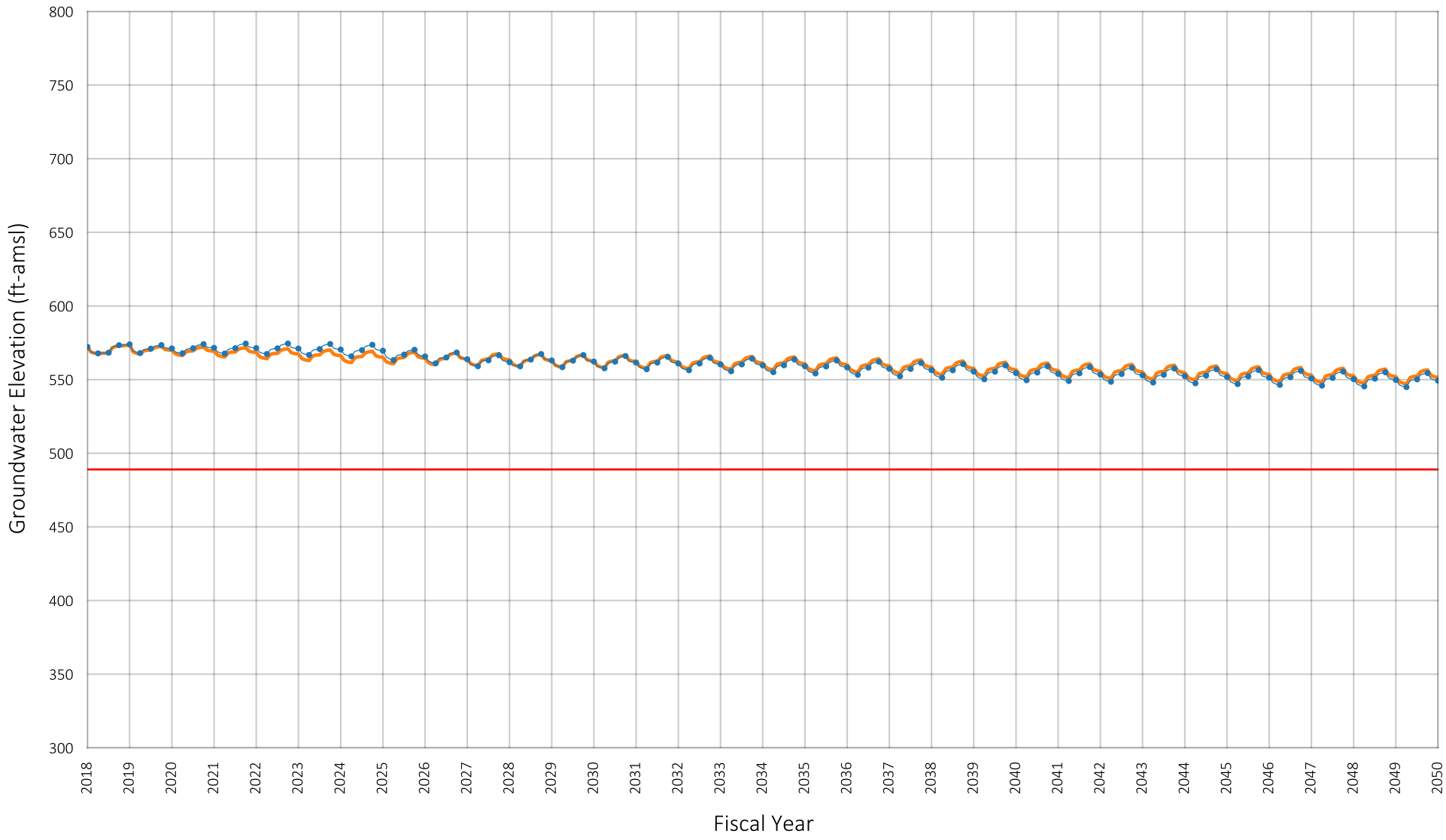
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002741
Owner: City of Chino
Well Name: 5

Figure A-9



Location of Well in Chino Basin

SYR1

LSLS

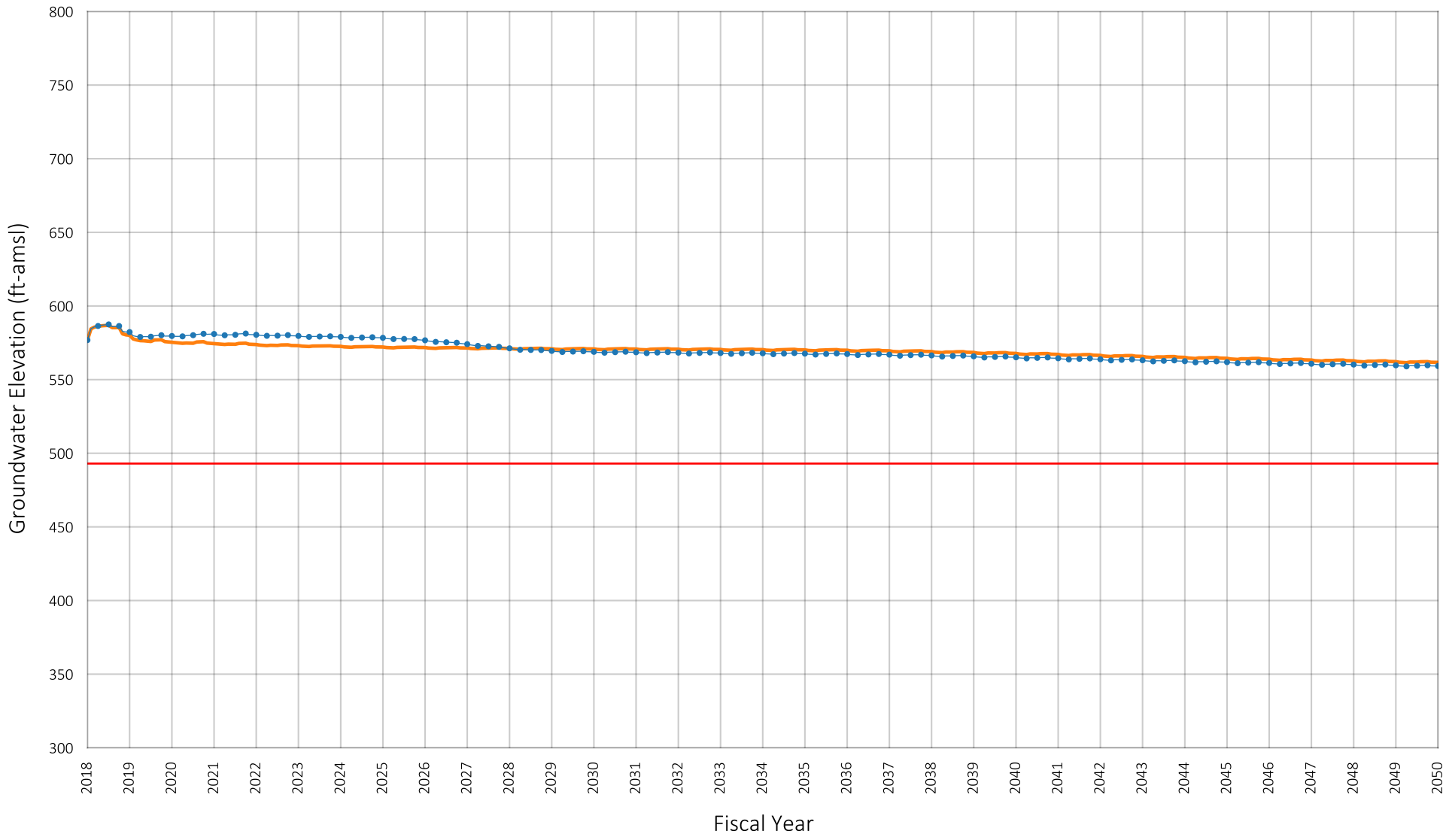
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1004176
Owner: City of Chino
Well Name: 6

Figure A-10



Location of Well in Chino Basin

SYR1

LSLS

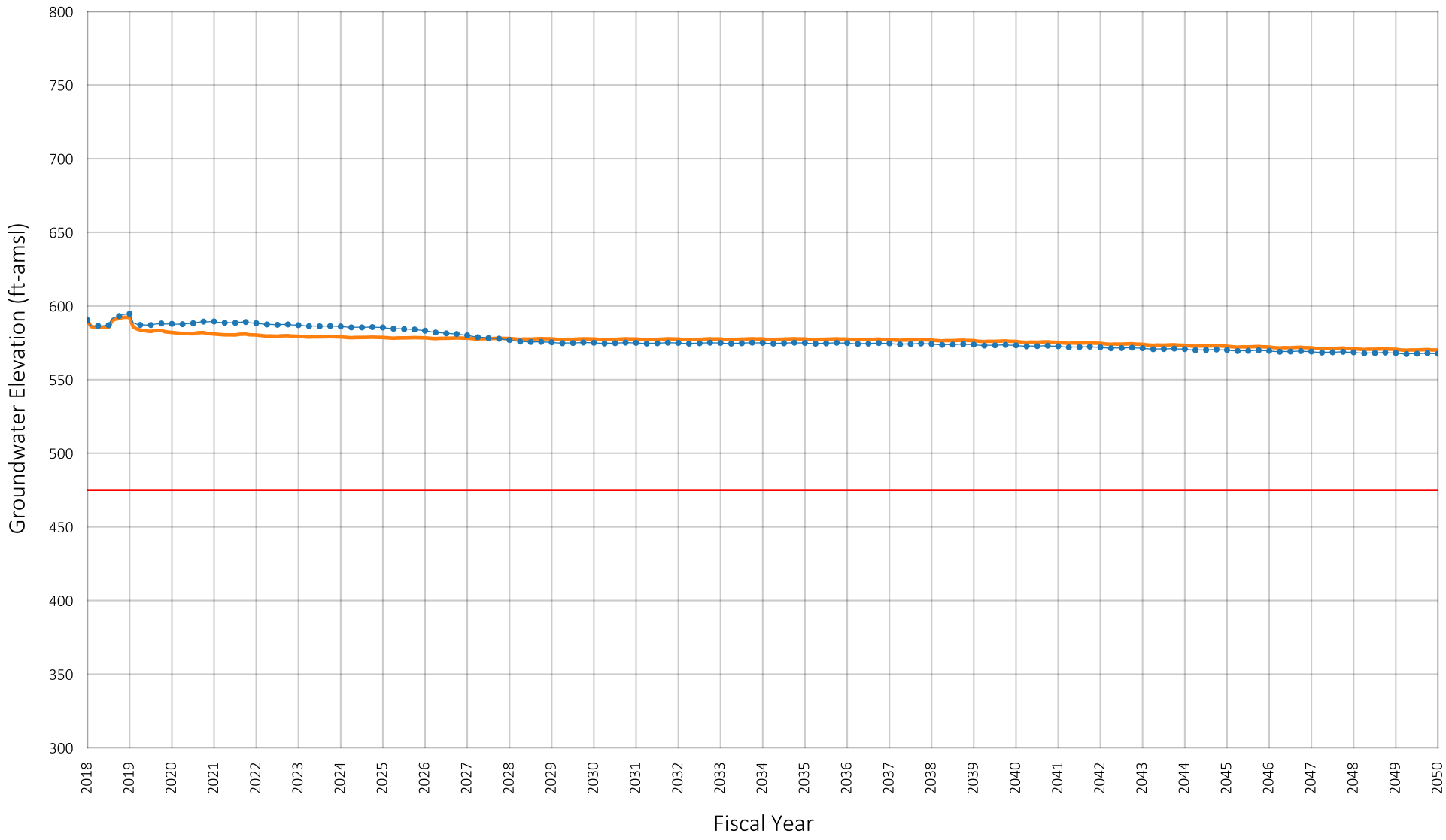
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002743
Owner: City of Chino
Well Name: 9

Figure A-11



Location of Well in Chino Basin

SYR1

LSLS

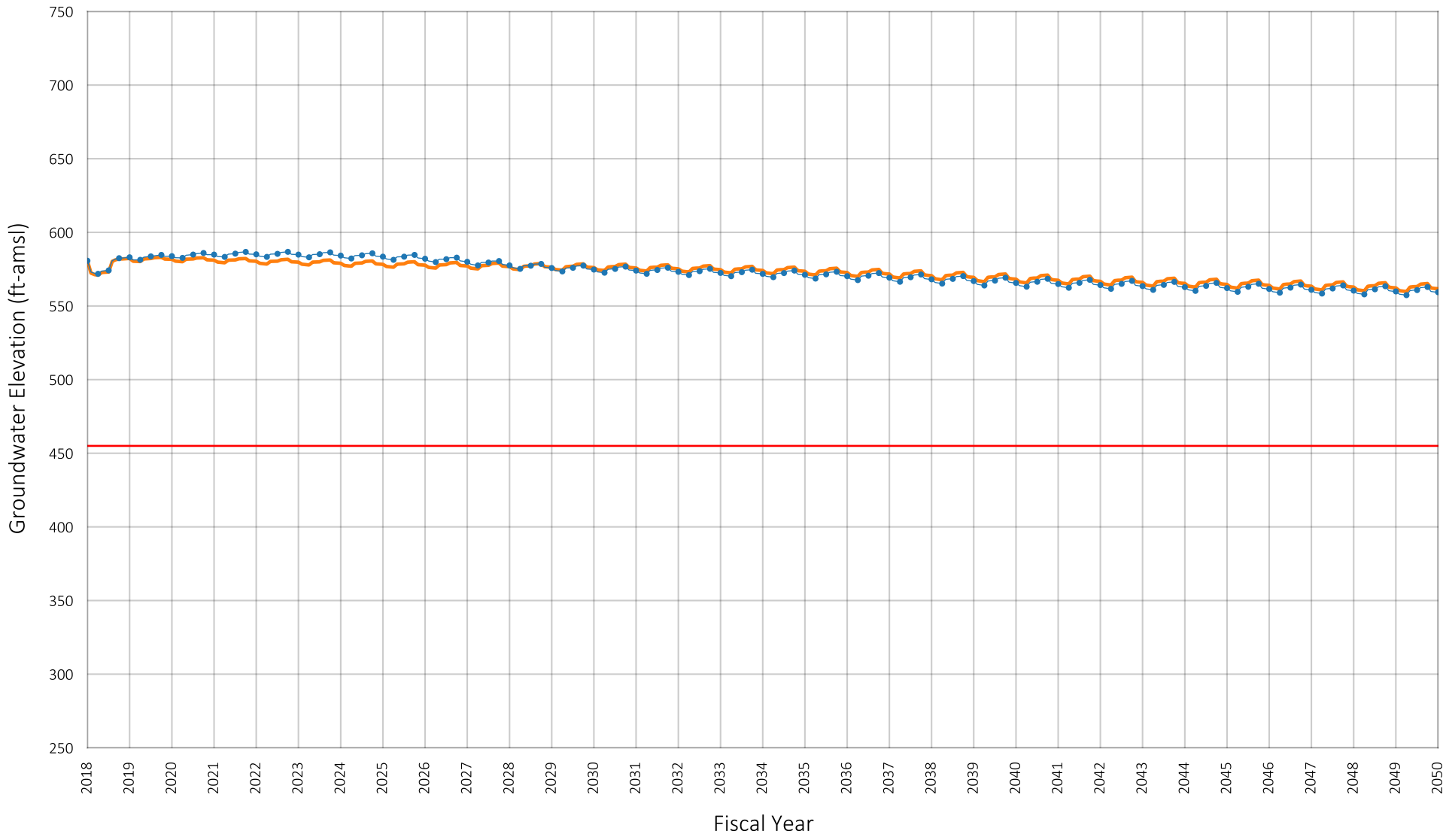
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1203283
Owner: City of Chino
Well Name: 10

Figure A-12



Location of Well in Chino Basin

SYR1

LSLS

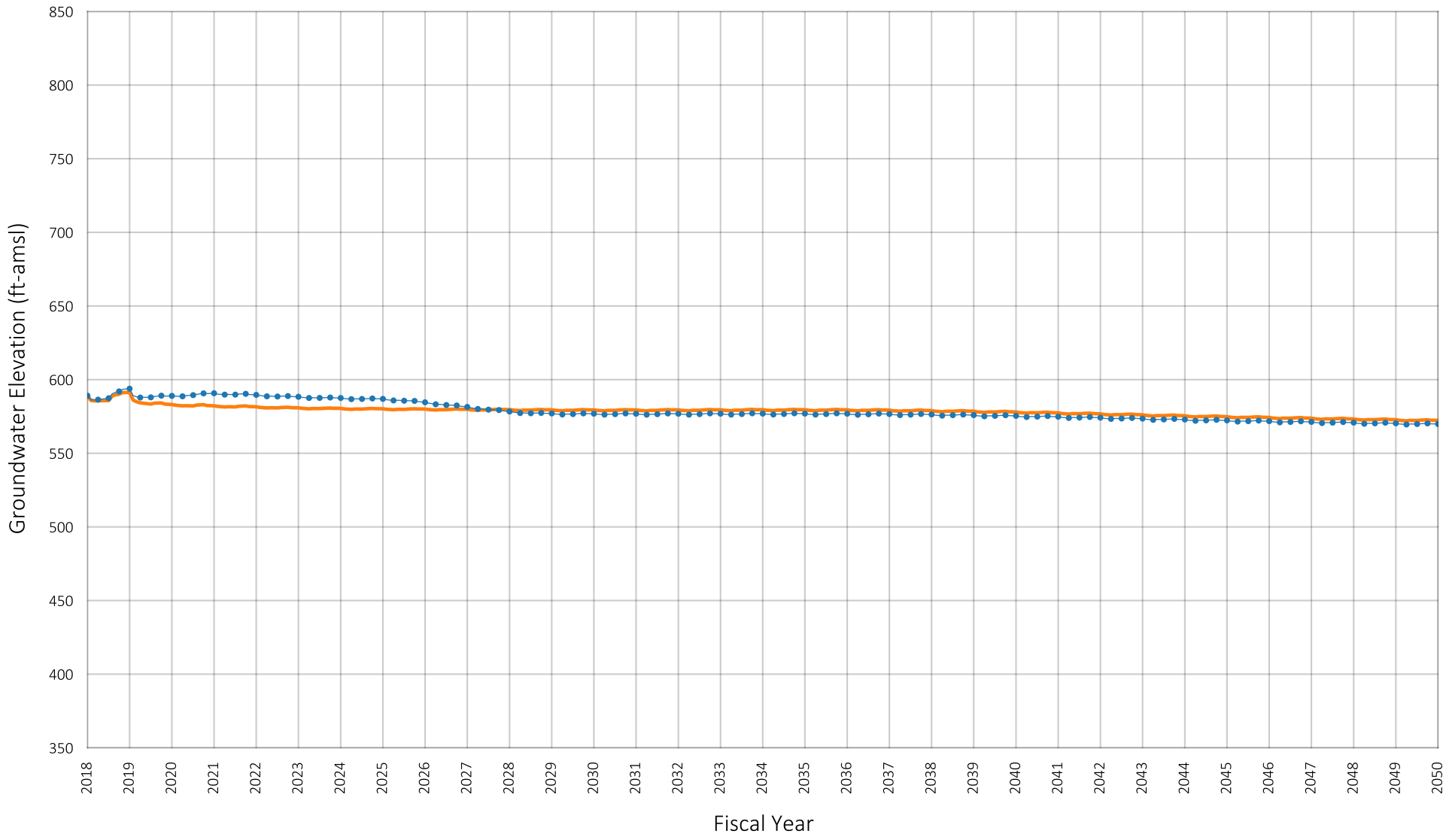
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003741
Owner: City of Chino
Well Name: 11

Figure A-13



Location of Well in Chino Basin

SYR1

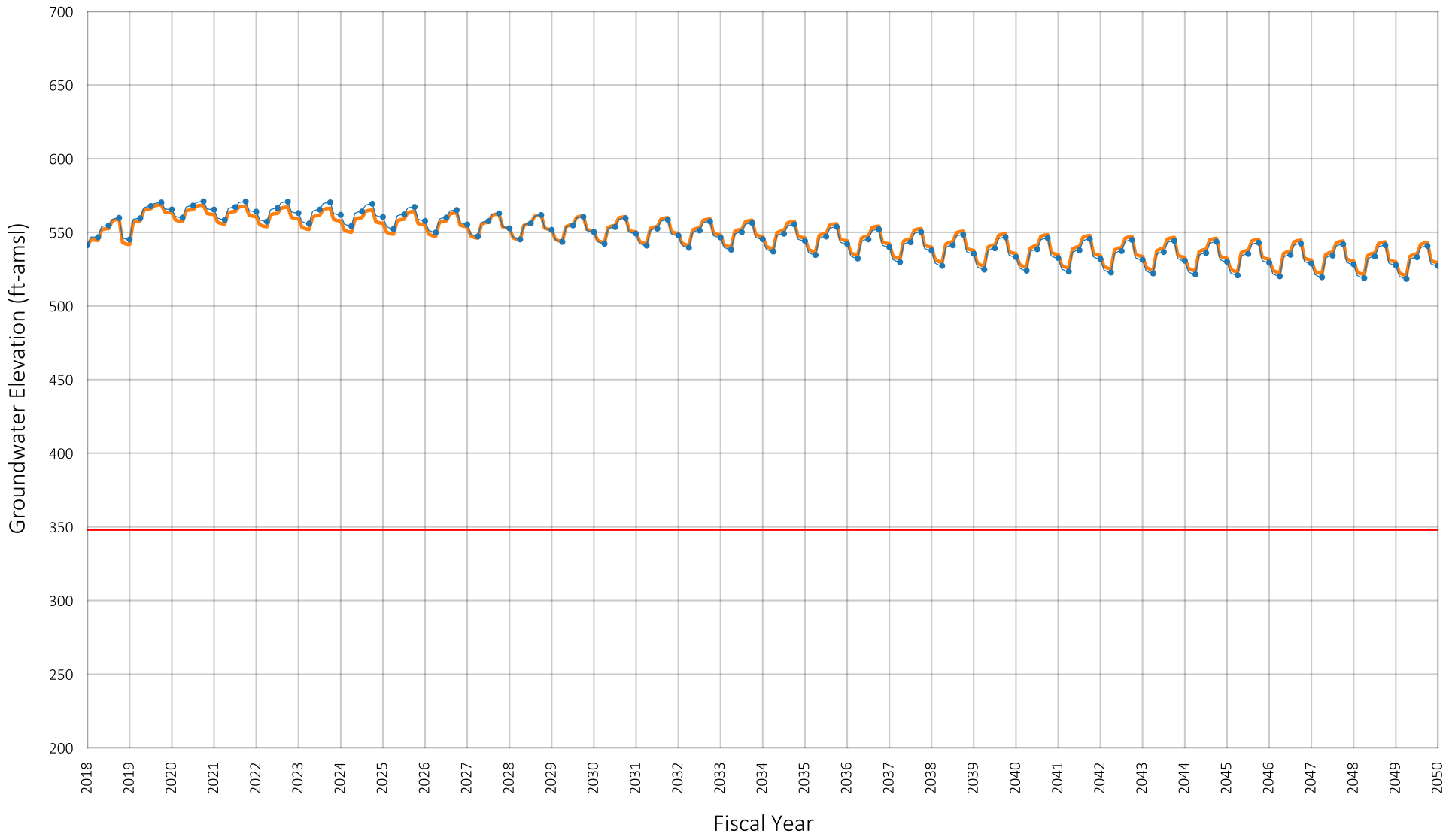
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002739
Owner: City of Chino
Well Name: 12

Figure A-14



Location of Well in Chino Basin

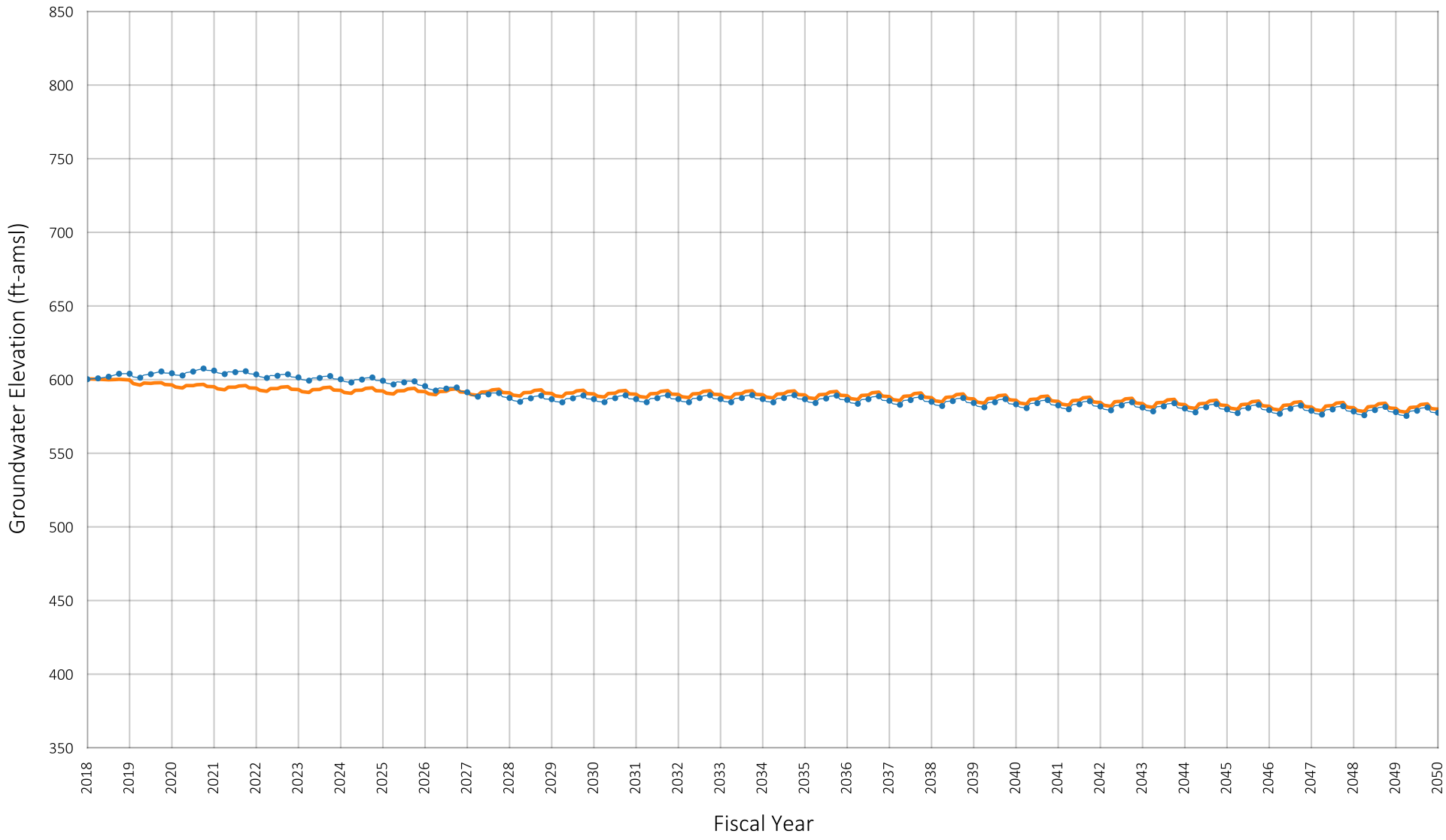
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1004185
Owner: City of Chino
Well Name: 13

Figure A-15



Location of Well in Chino Basin

SYR1

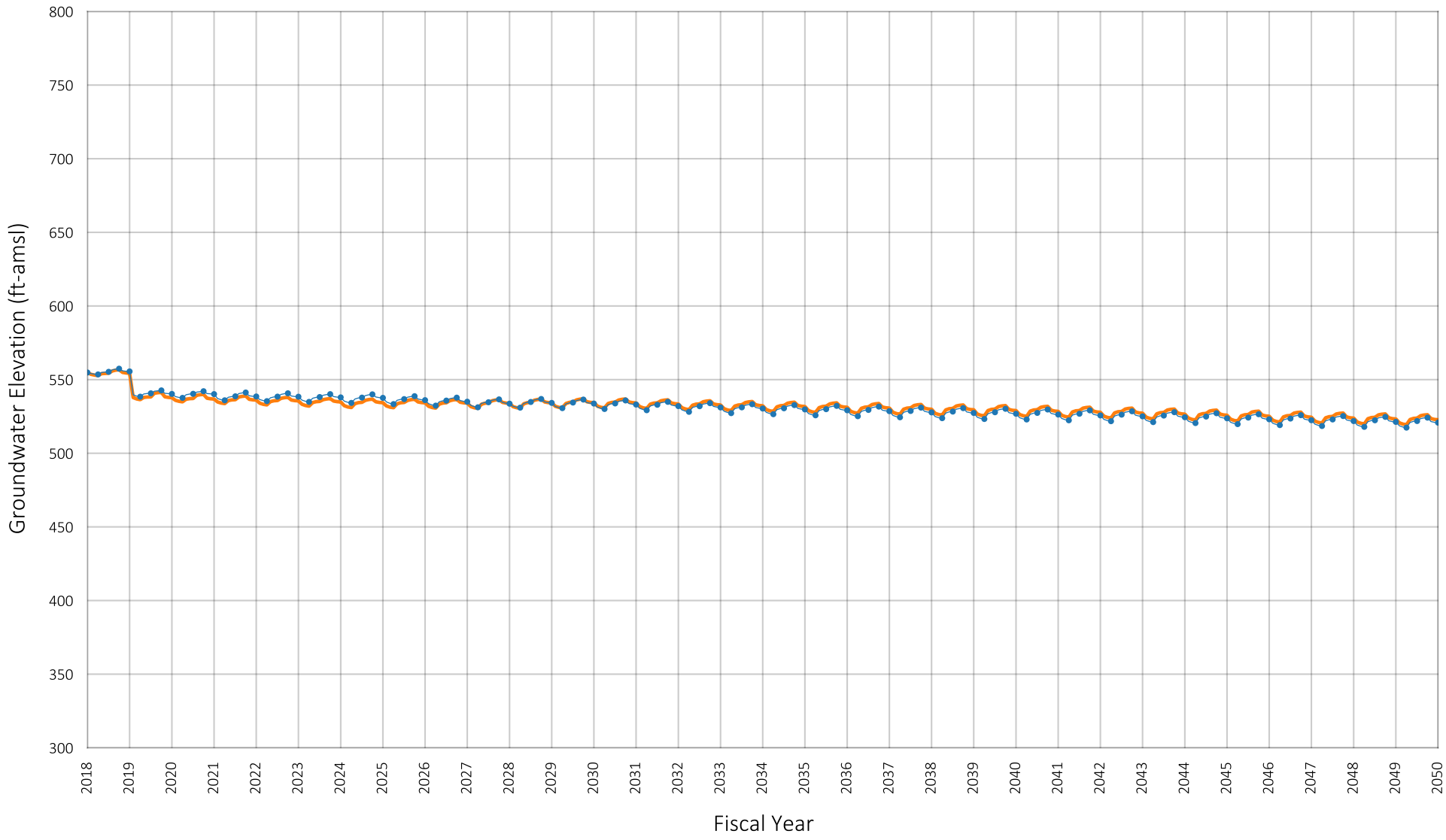
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002645
Owner: City of Chino
Well Name: 14

Figure A-16



Location of Well in Chino Basin

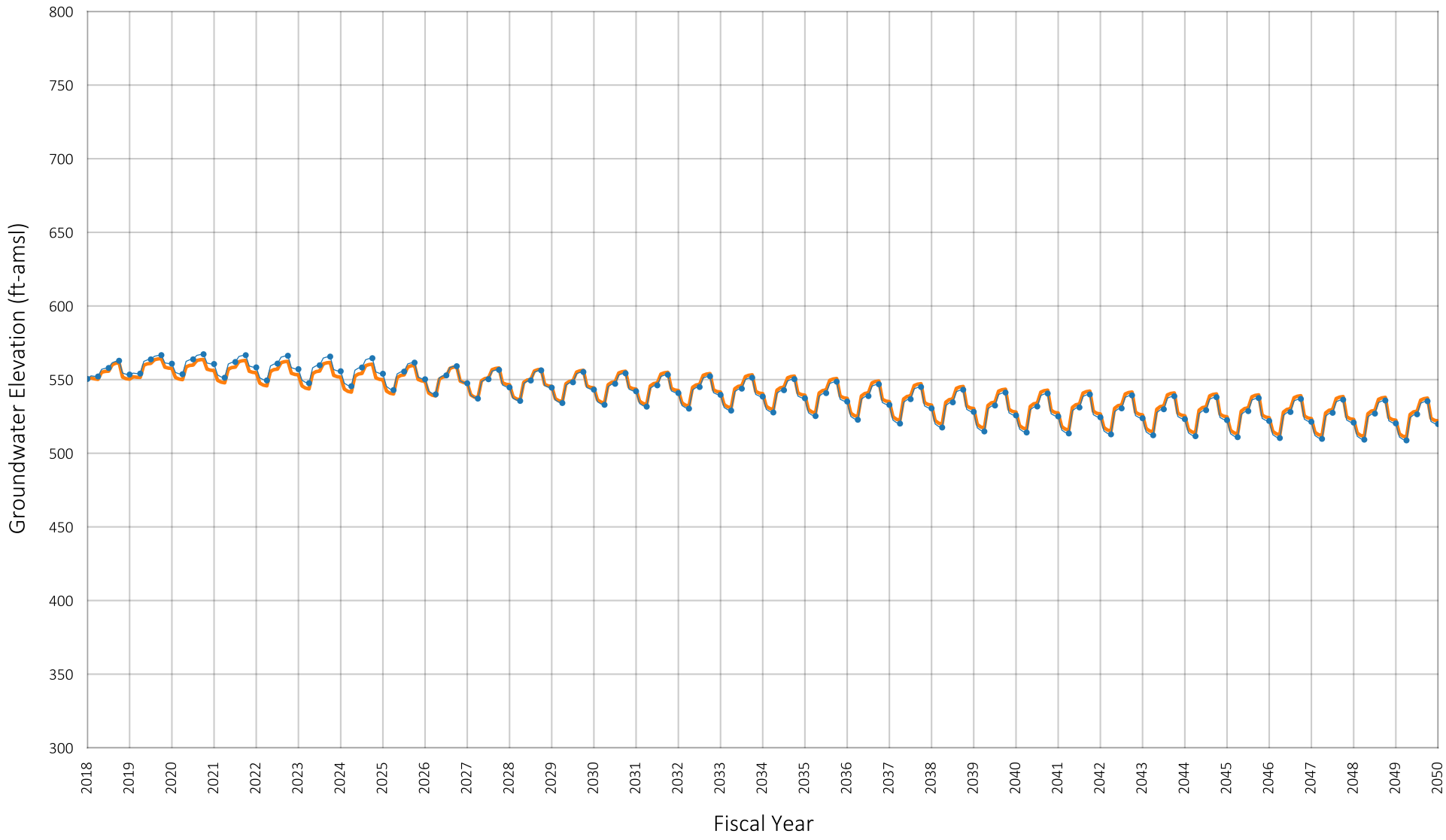
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1208673
Owner: City of Chino
Well Name: 16

Figure A-17



Location of Well in Chino Basin

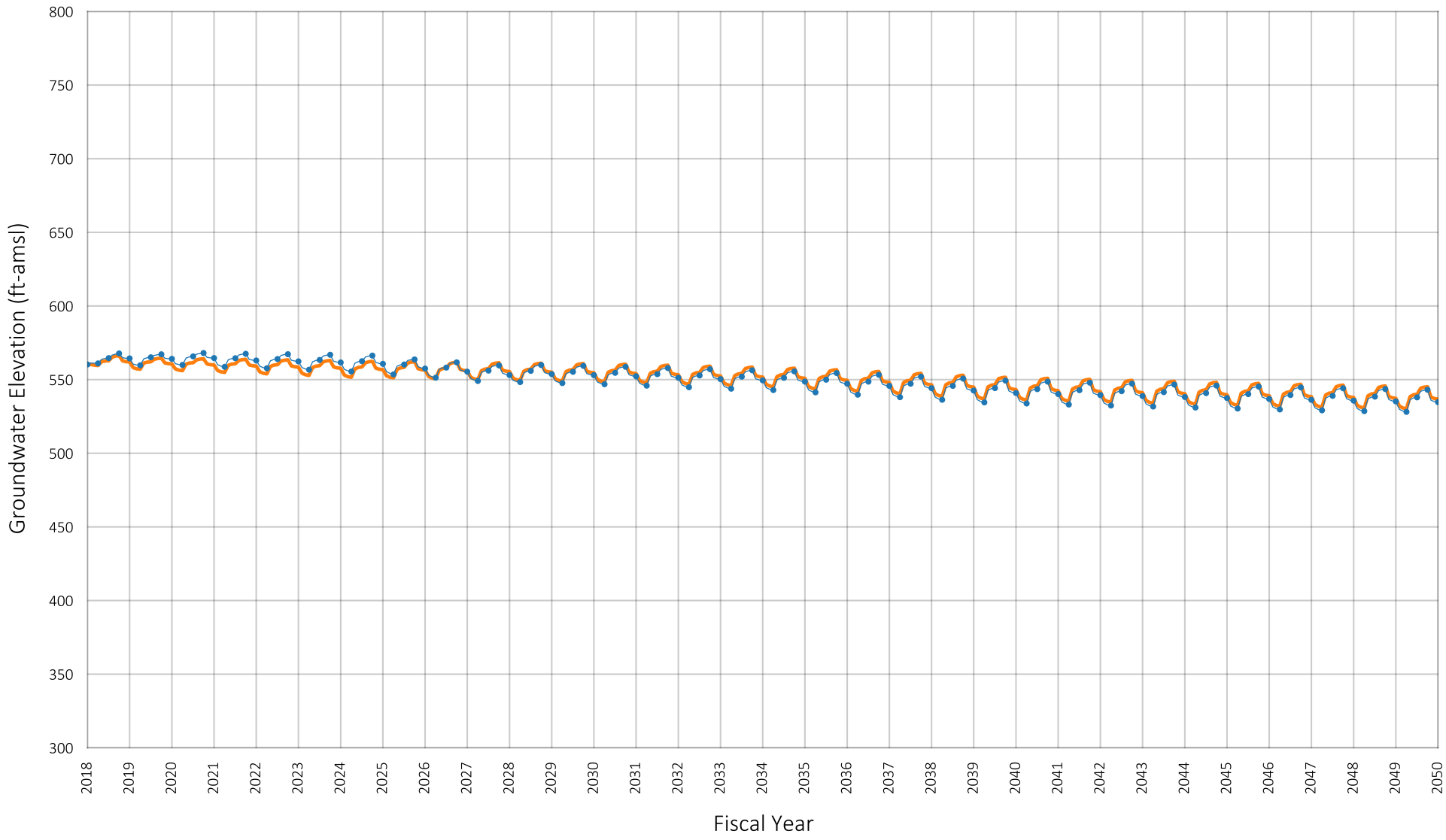
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1234063
Owner: City of Chino
Well Name: 19

Figure A-18



Location of Well in Chino Basin

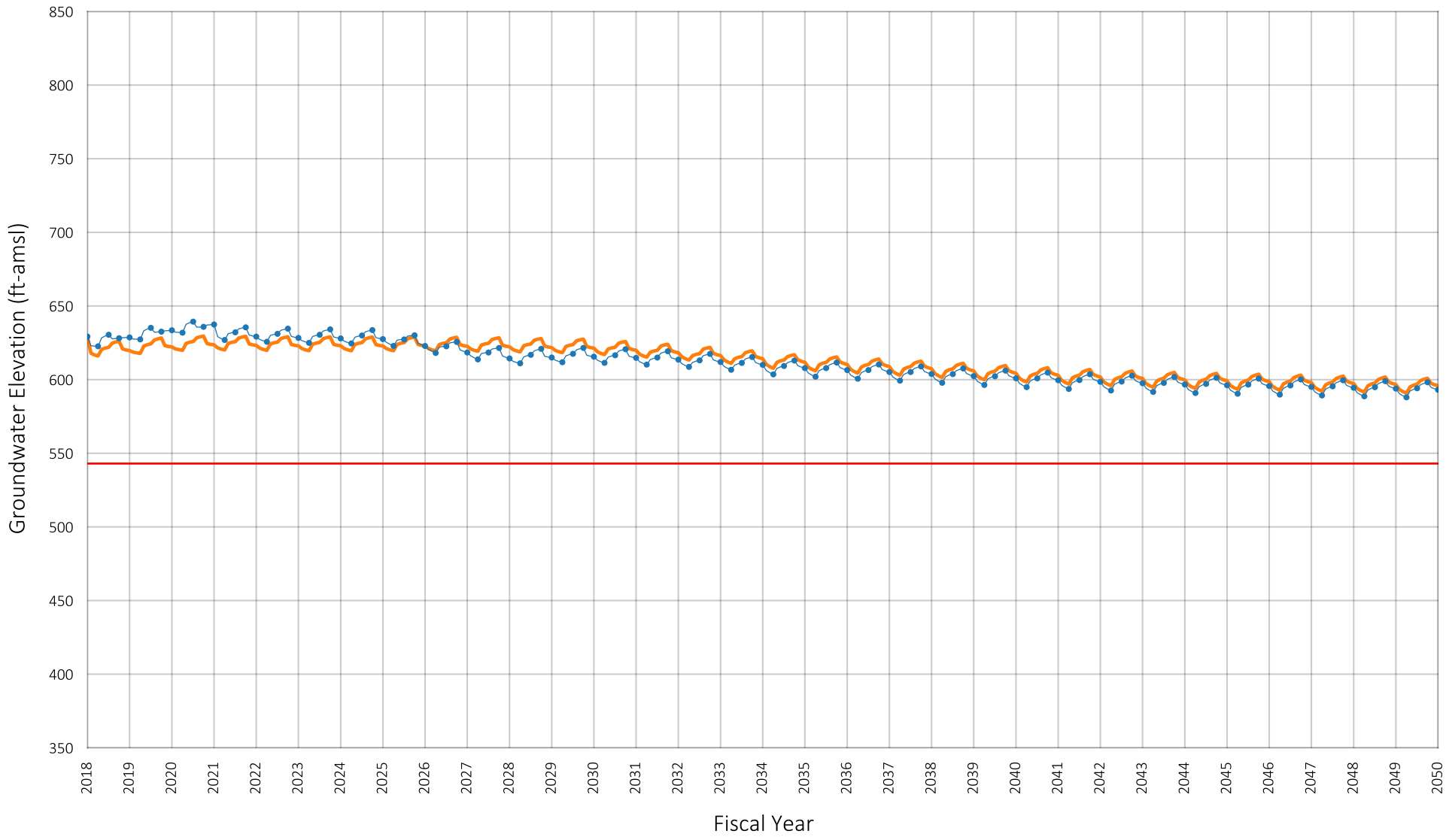
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1224773
Owner: City of Chino
Well Name: 18

Figure A-19



Location of Well in Chino Basin

SYR1

LSLS

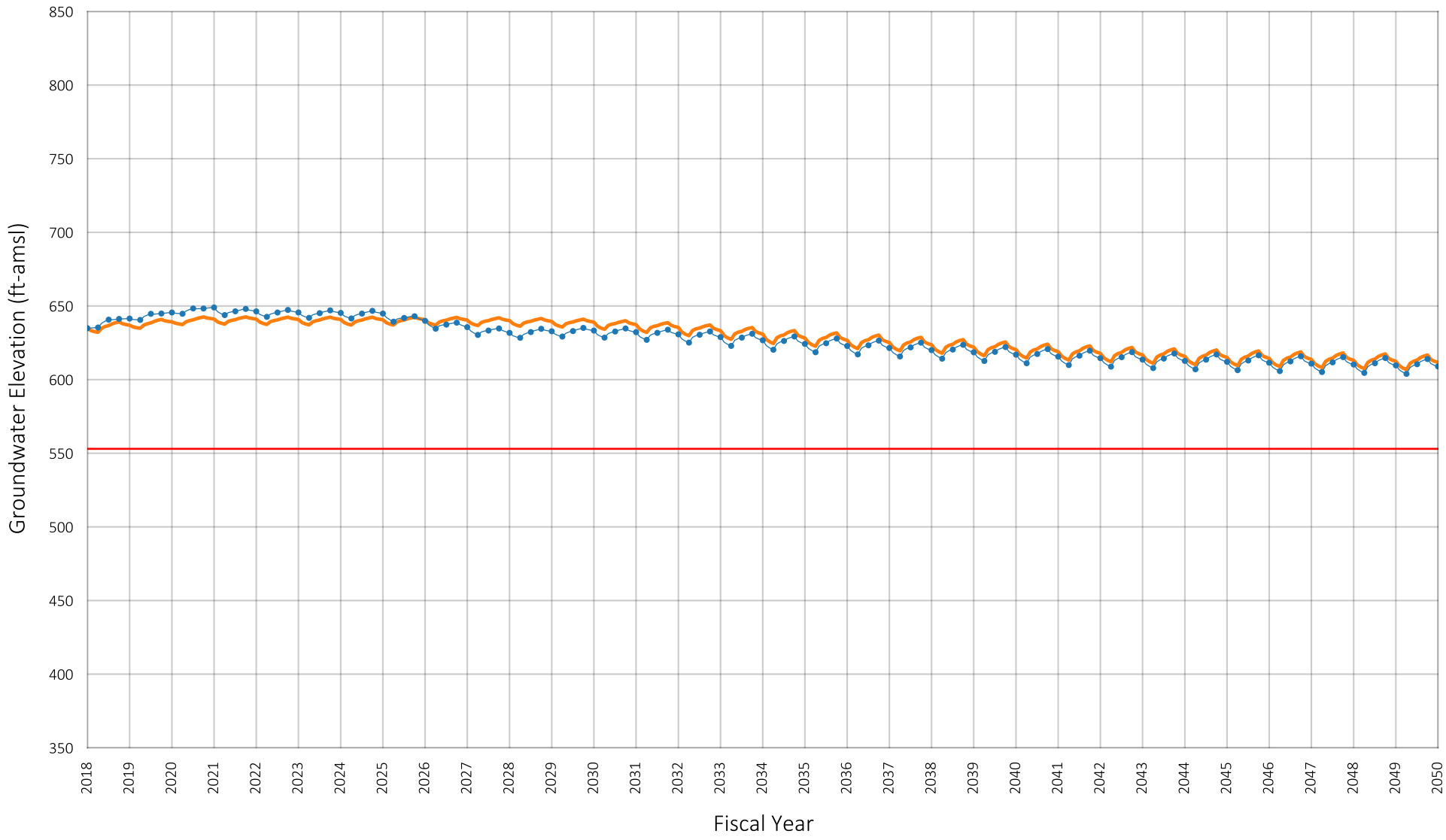
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002309
Owner: Cucamonga Valley Water District
Well Name: CB-1

Figure A-20



Location of Well in Chino Basin

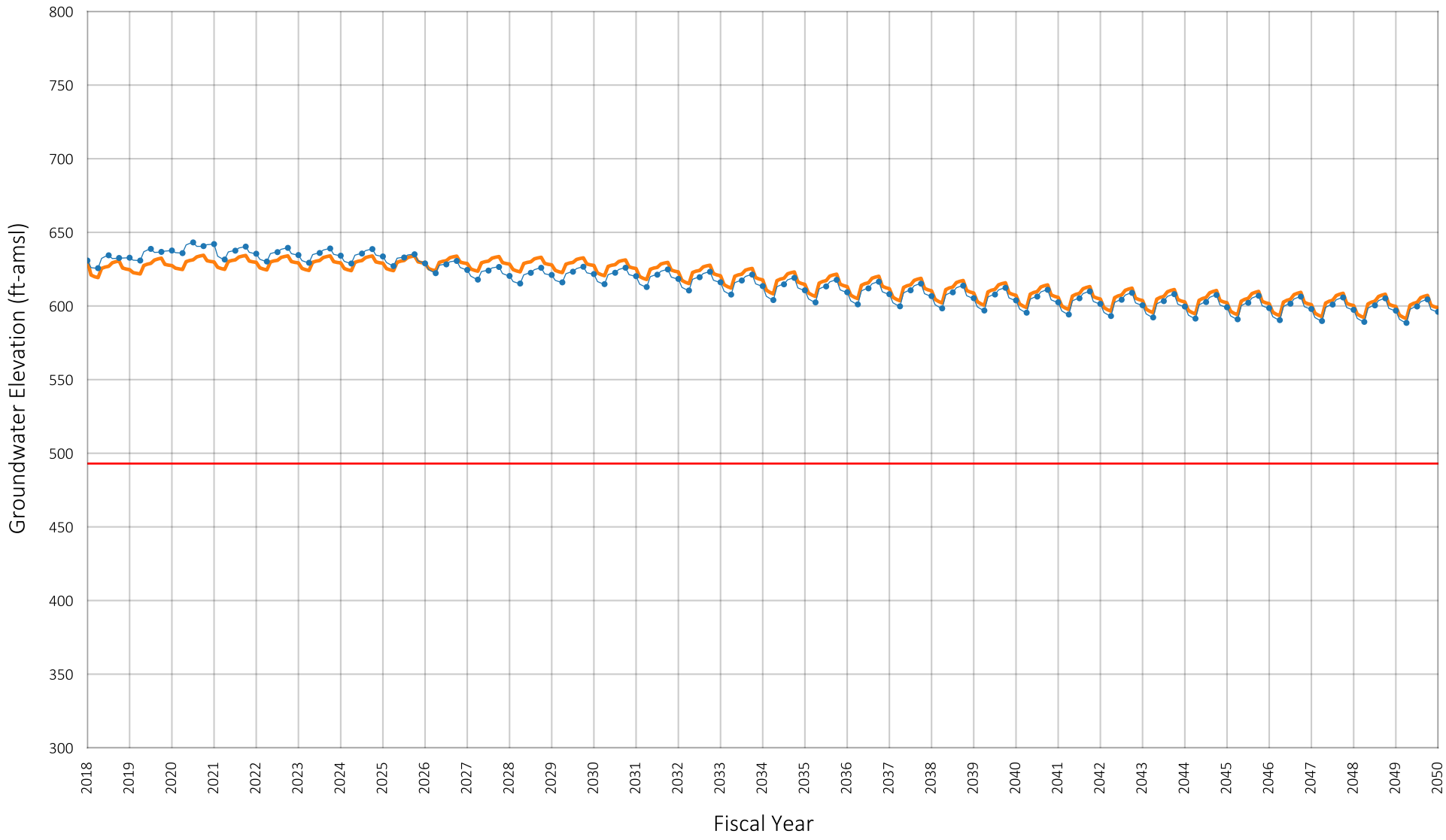
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002312
Owner: Cucamonga Valley Water District
Well Name: CB-3

Figure A-21



Location of Well in Chino Basin

SYR1

LSLS

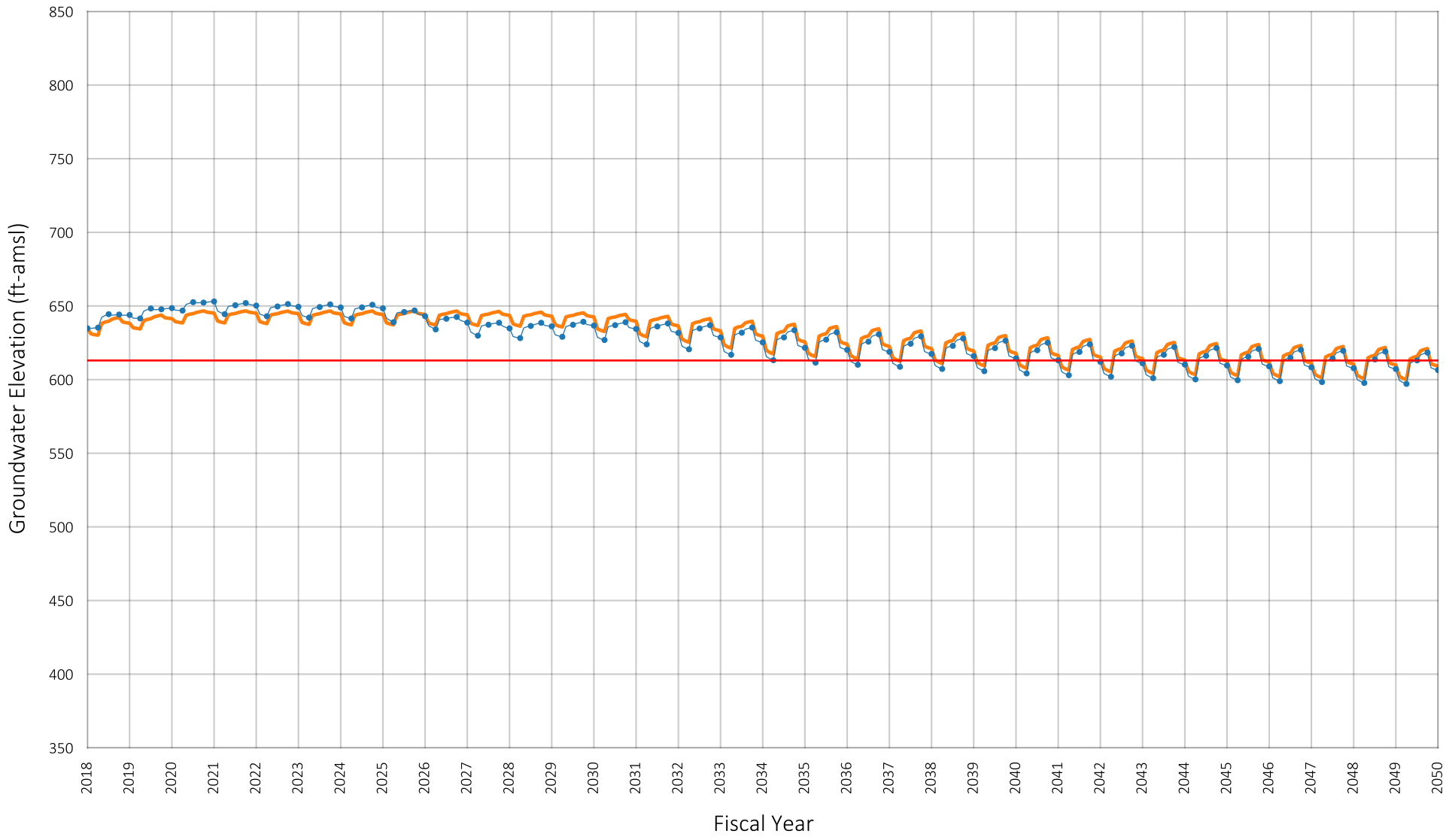
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002307
Owner: Cucamonga Valley Water District
Well Name: CB-4

Figure A-22



Location of Well in Chino Basin

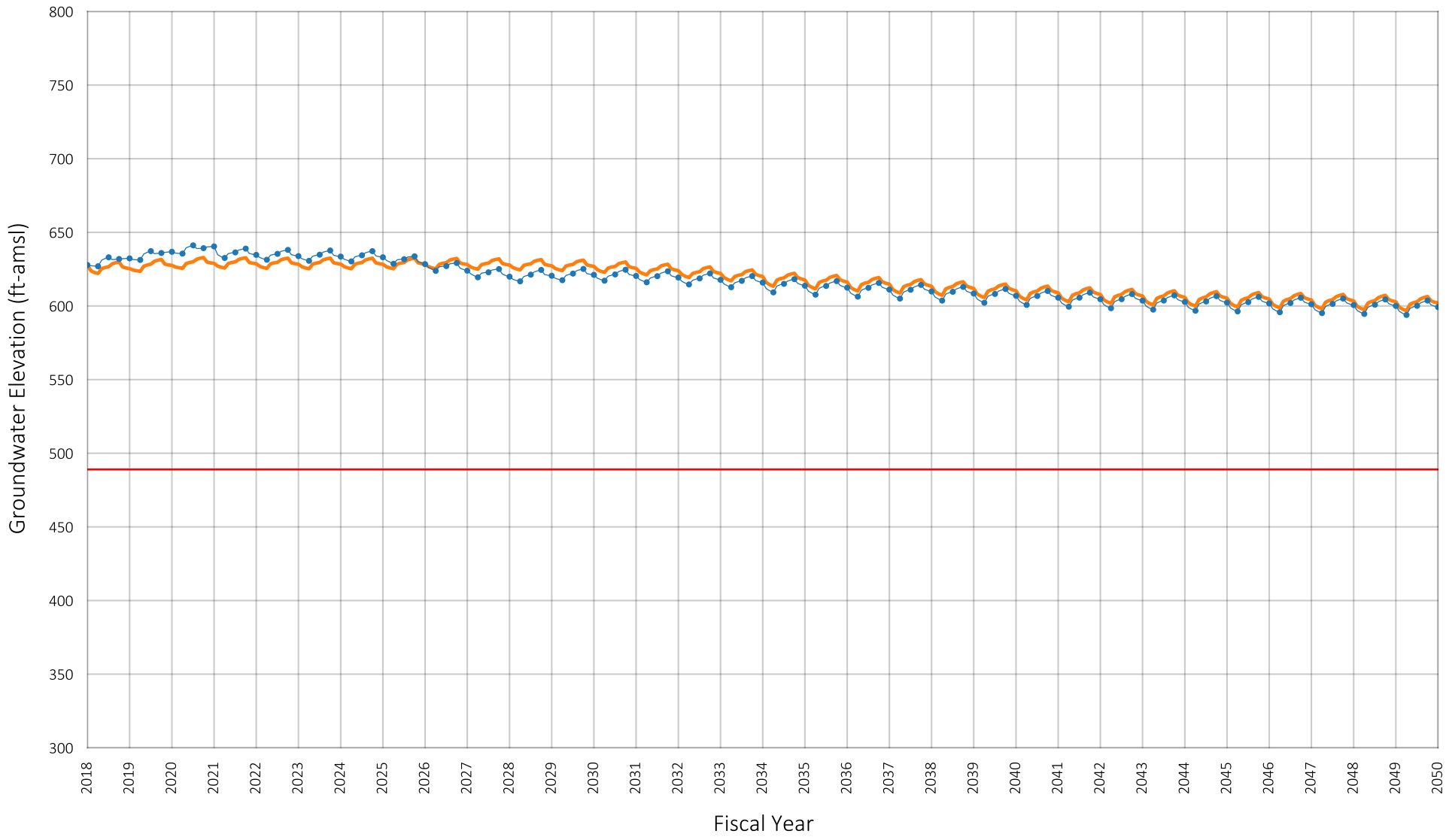
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002311
Owner: Cucamonga Valley Water District
Well Name: CB-5

Figure A-23



Location of Well in Chino Basin

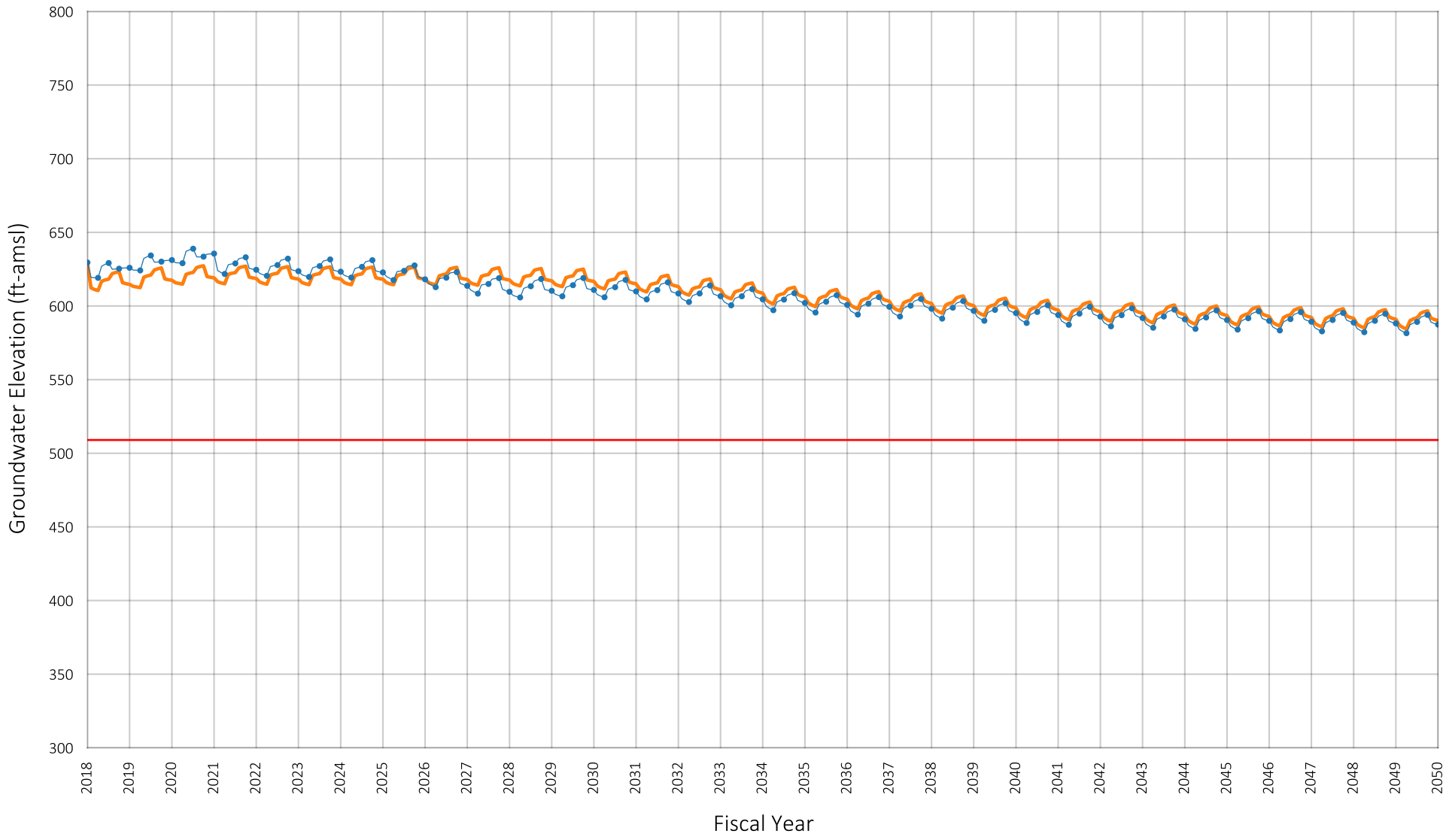
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002308
Owner: Cucamonga Valley Water District
Well Name: CB-30

Figure A-24



Location of Well in Chino Basin

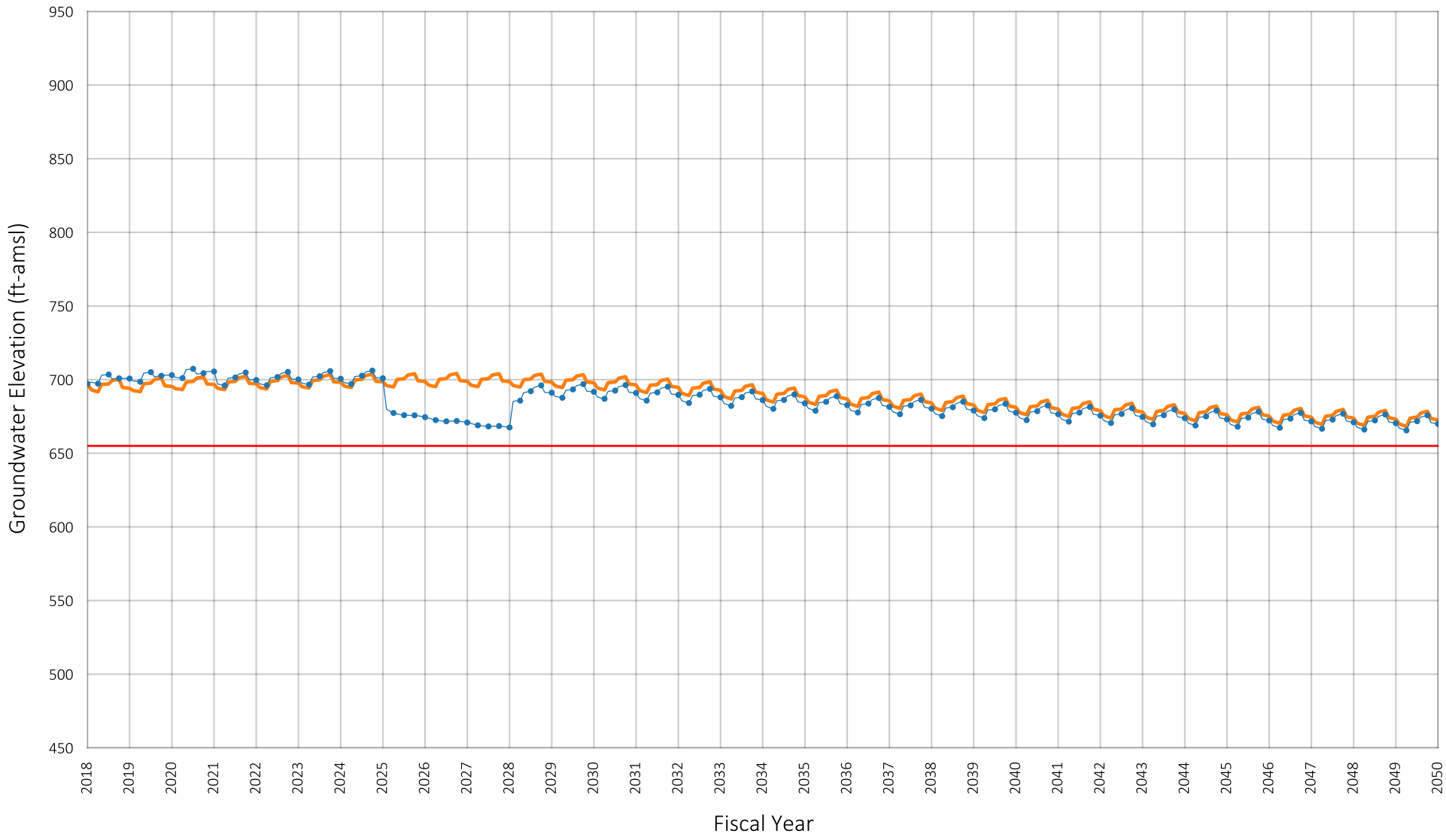
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206753
Owner: Cucamonga Valley Water District
Well Name: CB-38

Figure A-25



Location of Well in Chino Basin

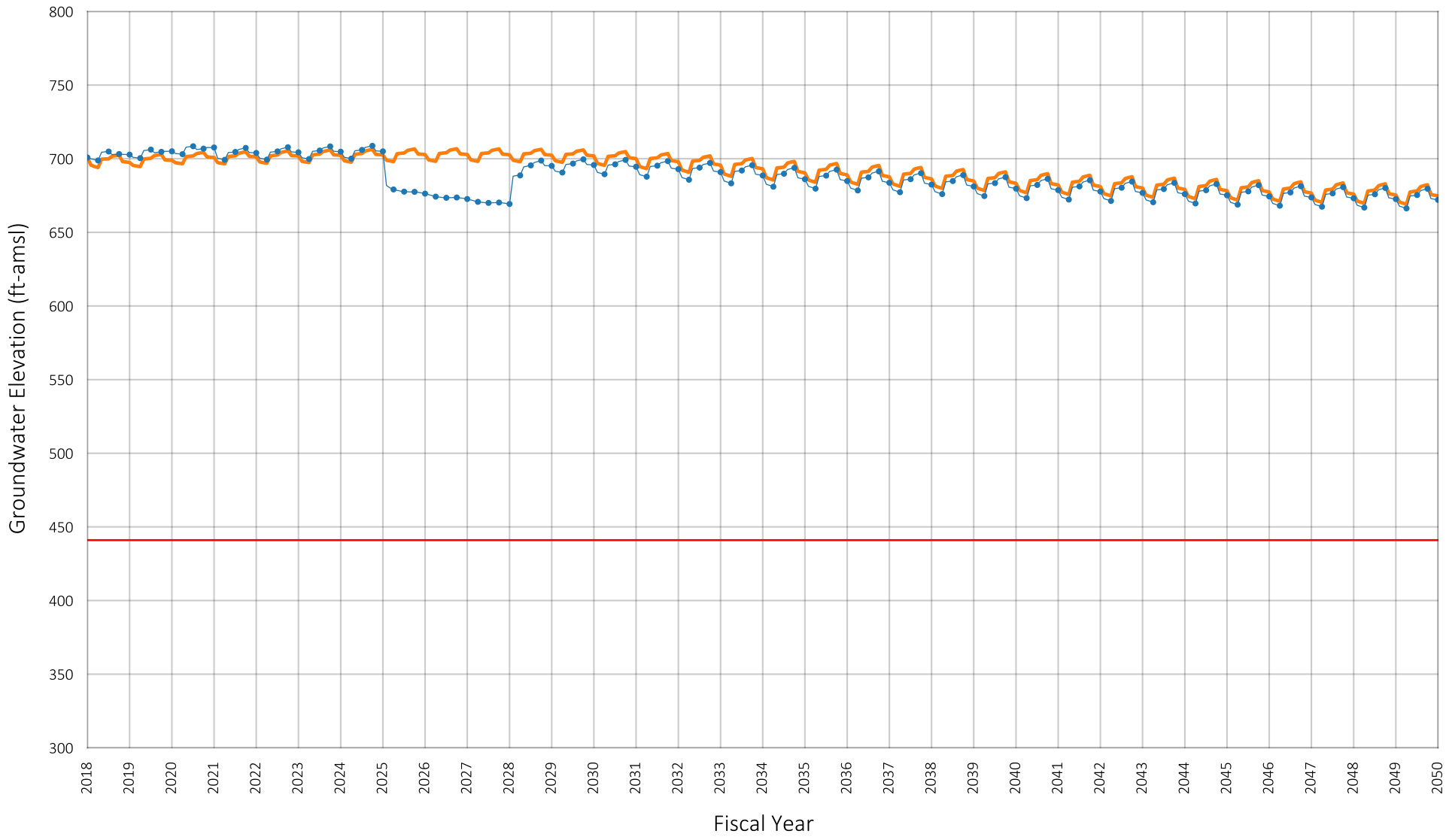
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207928
Owner: Cucamonga Valley Water District
Well Name: CB-39

Figure A-26



Location of Well in Chino Basin

SYR1

LSLS

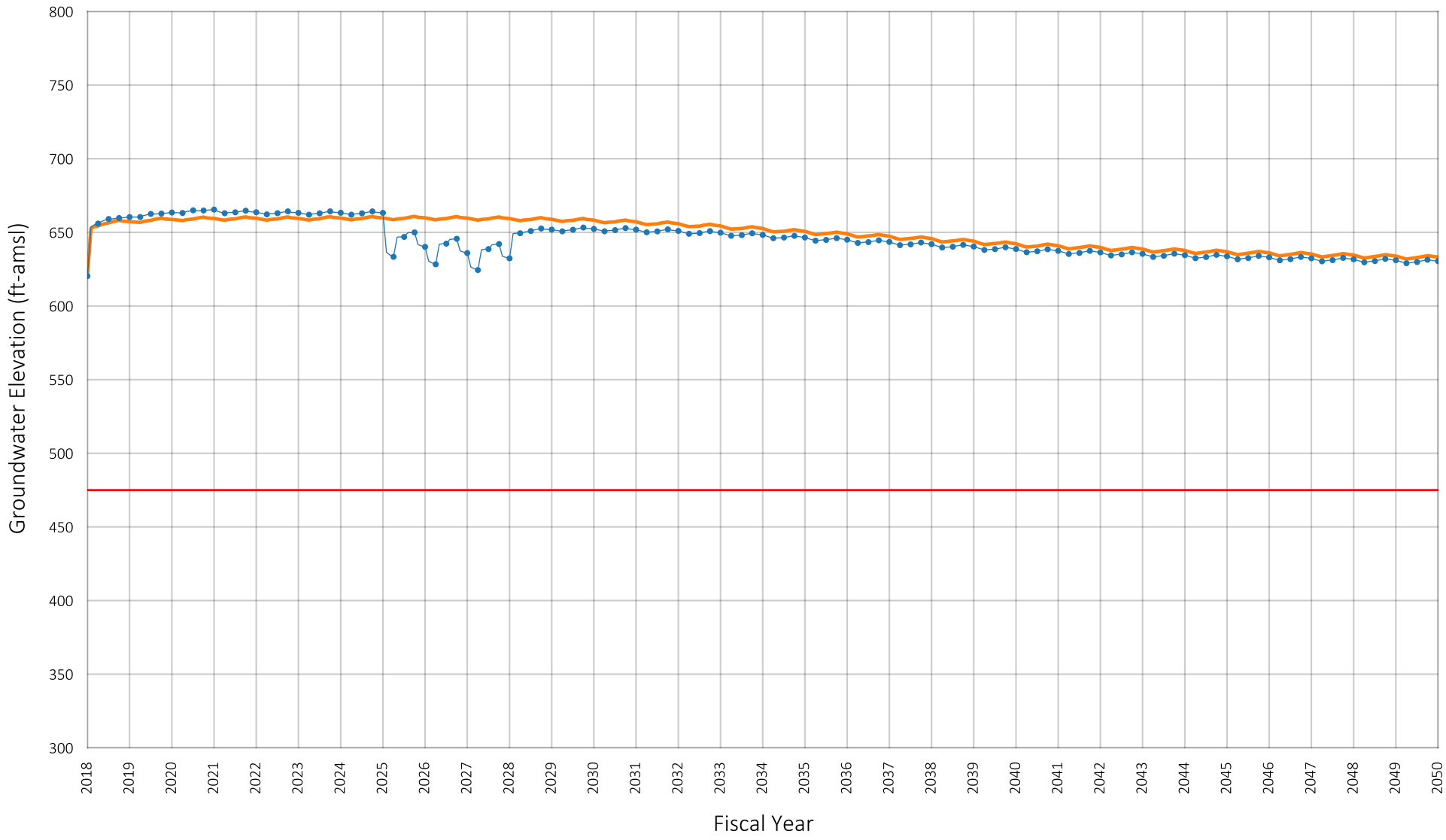
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207929
Owner: Cucamonga Valley Water District
Well Name: CB-40

Figure A-27



Location of Well in Chino Basin

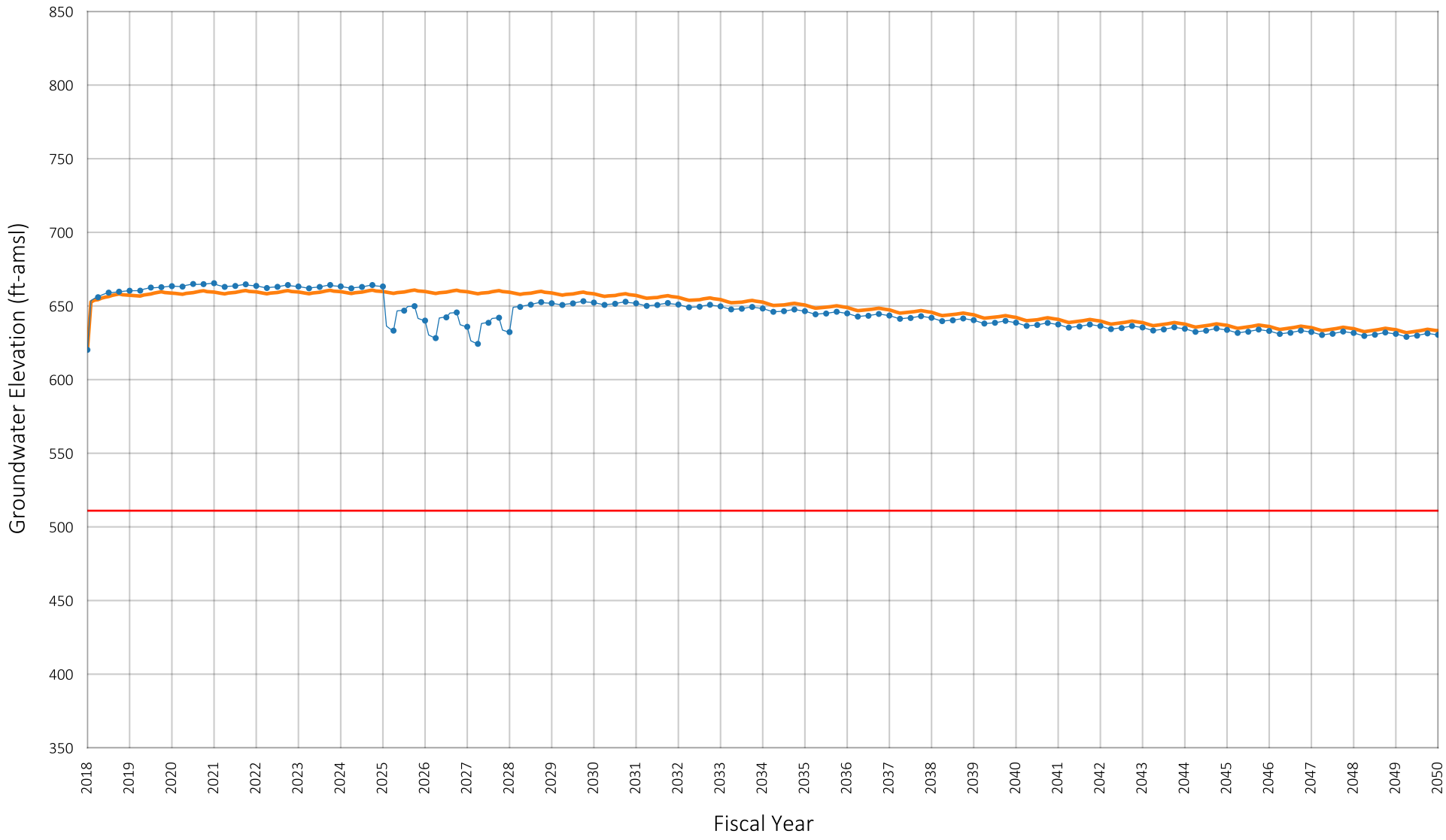
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207936
Owner: Cucamonga Valley Water District
Well Name: CB-41

Figure A-28



Location of Well in Chino Basin

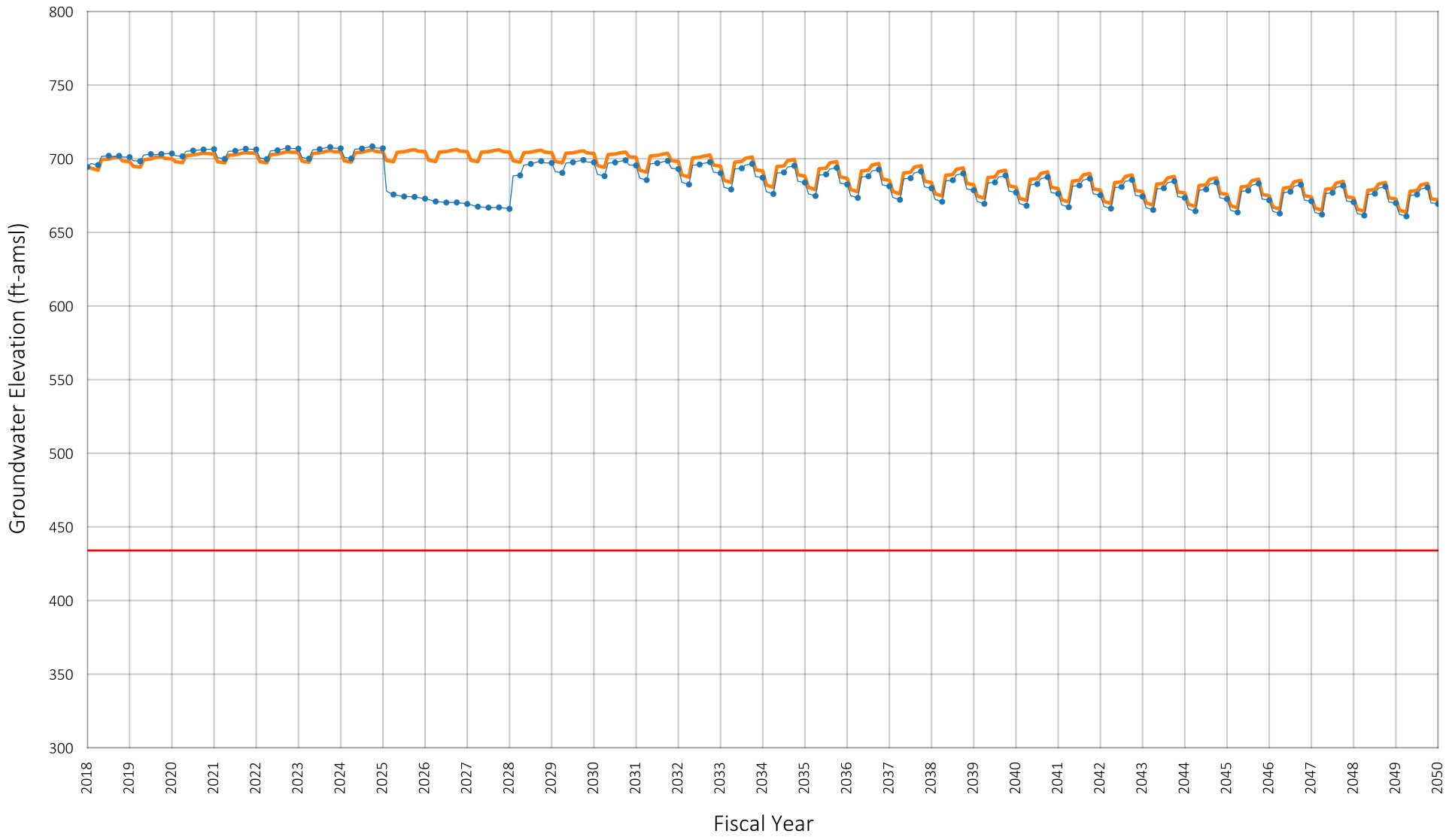
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207937
Owner: Cucamonga Valley Water District
Well Name: CB-42

Figure A-29



Location of Well in Chino Basin

SYR1

LSLS

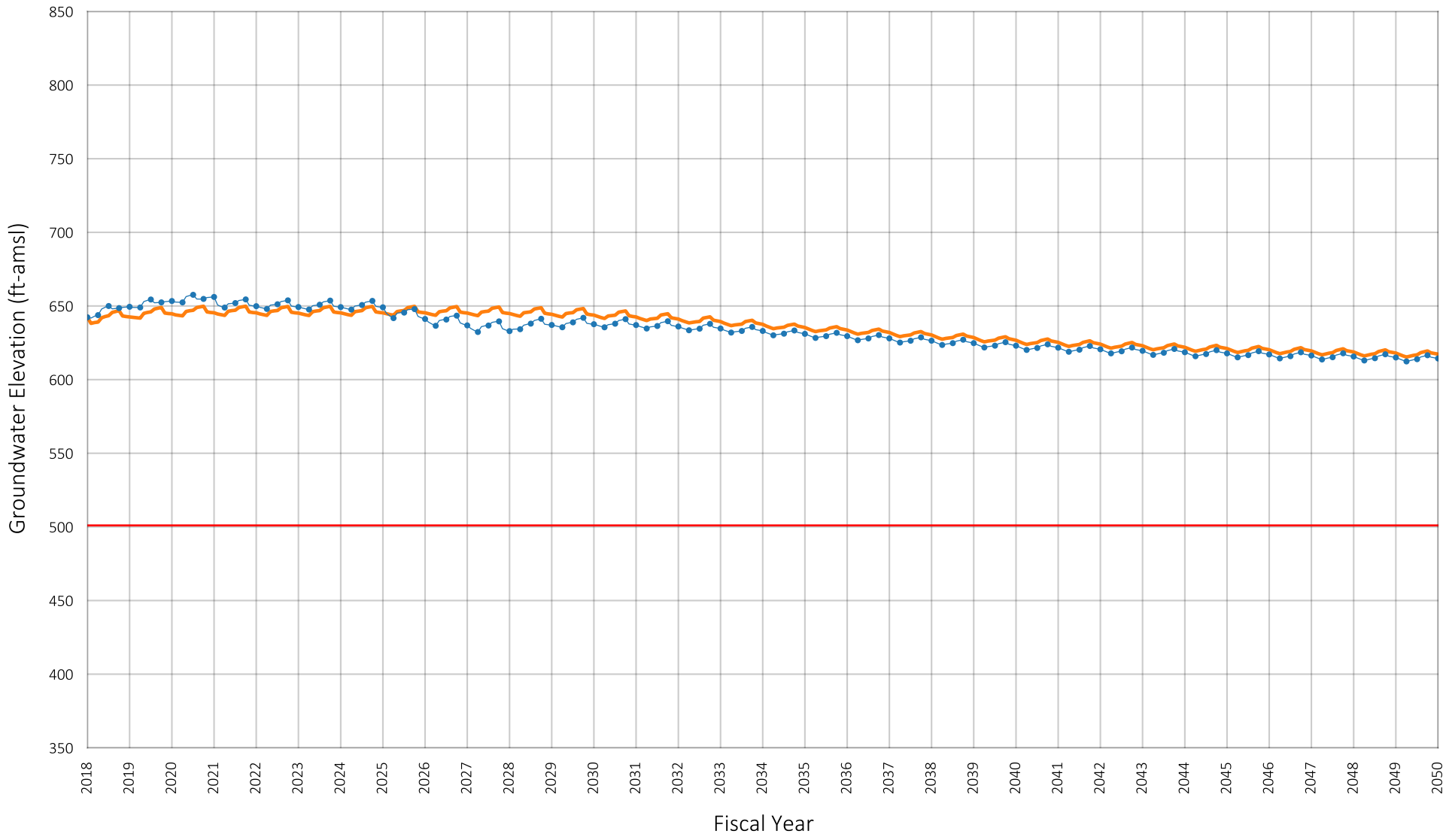
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1220079
Owner: Cucamonga Valley Water District
Well Name: CB-43

Figure A-30



Location of Well in Chino Basin

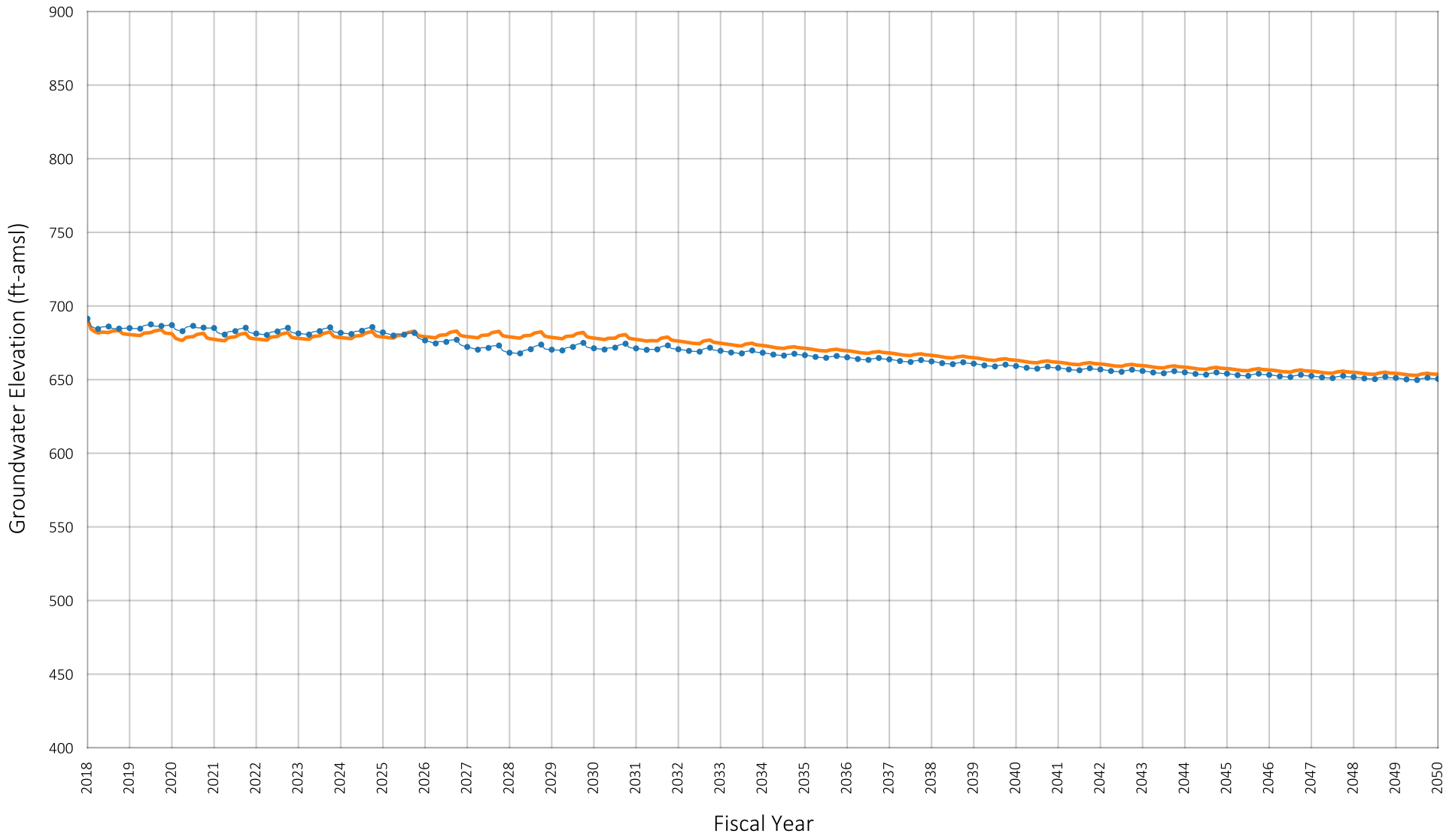
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1220080
Owner: Cucamonga Valley Water District
Well Name: CB-46

Figure A-31



Location of Well in Chino Basin

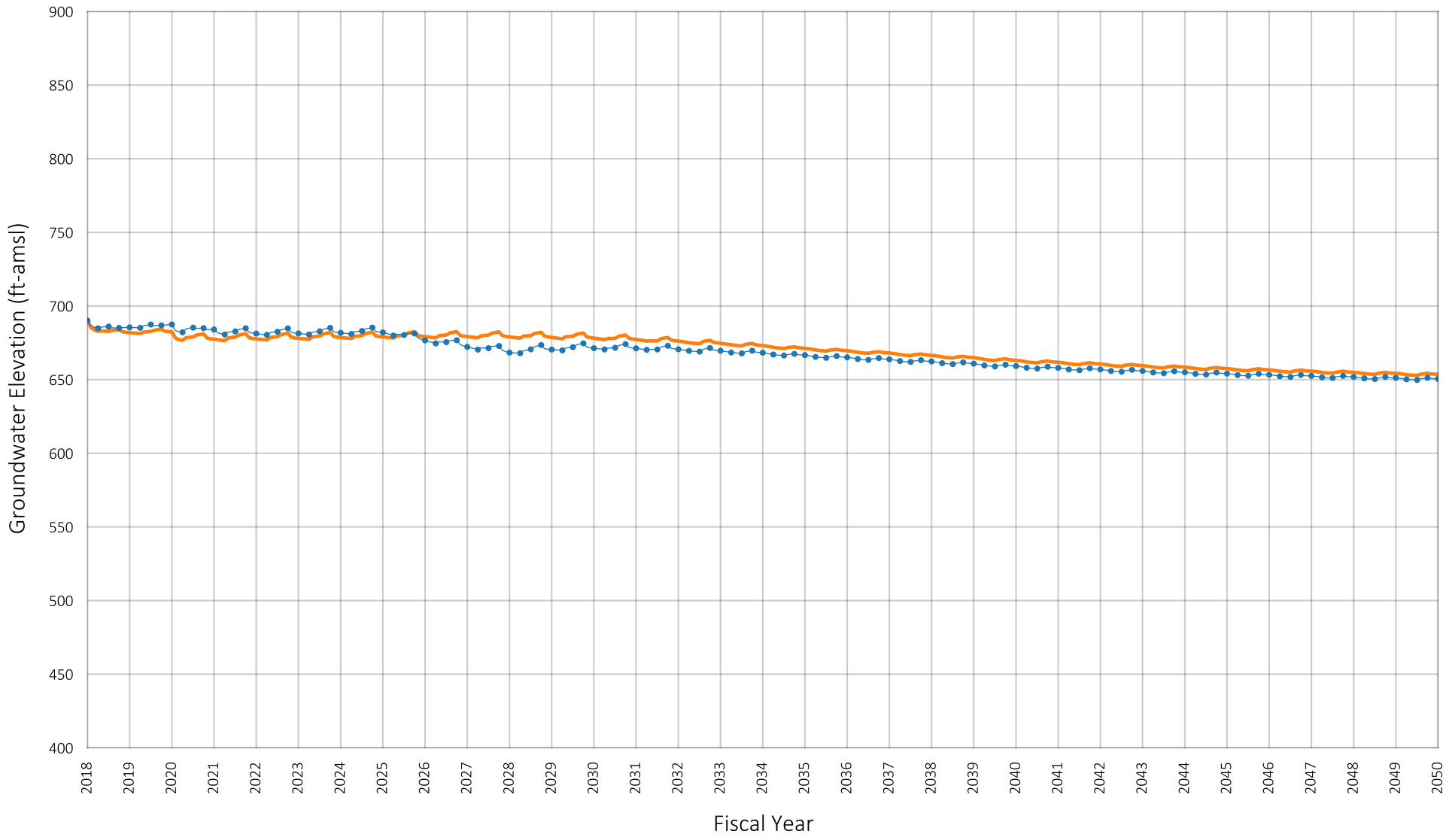
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 9100001
Owner: Cucamonga Valley Water District
Well Name: CB-49

Figure A-32



Location of Well in Chino Basin

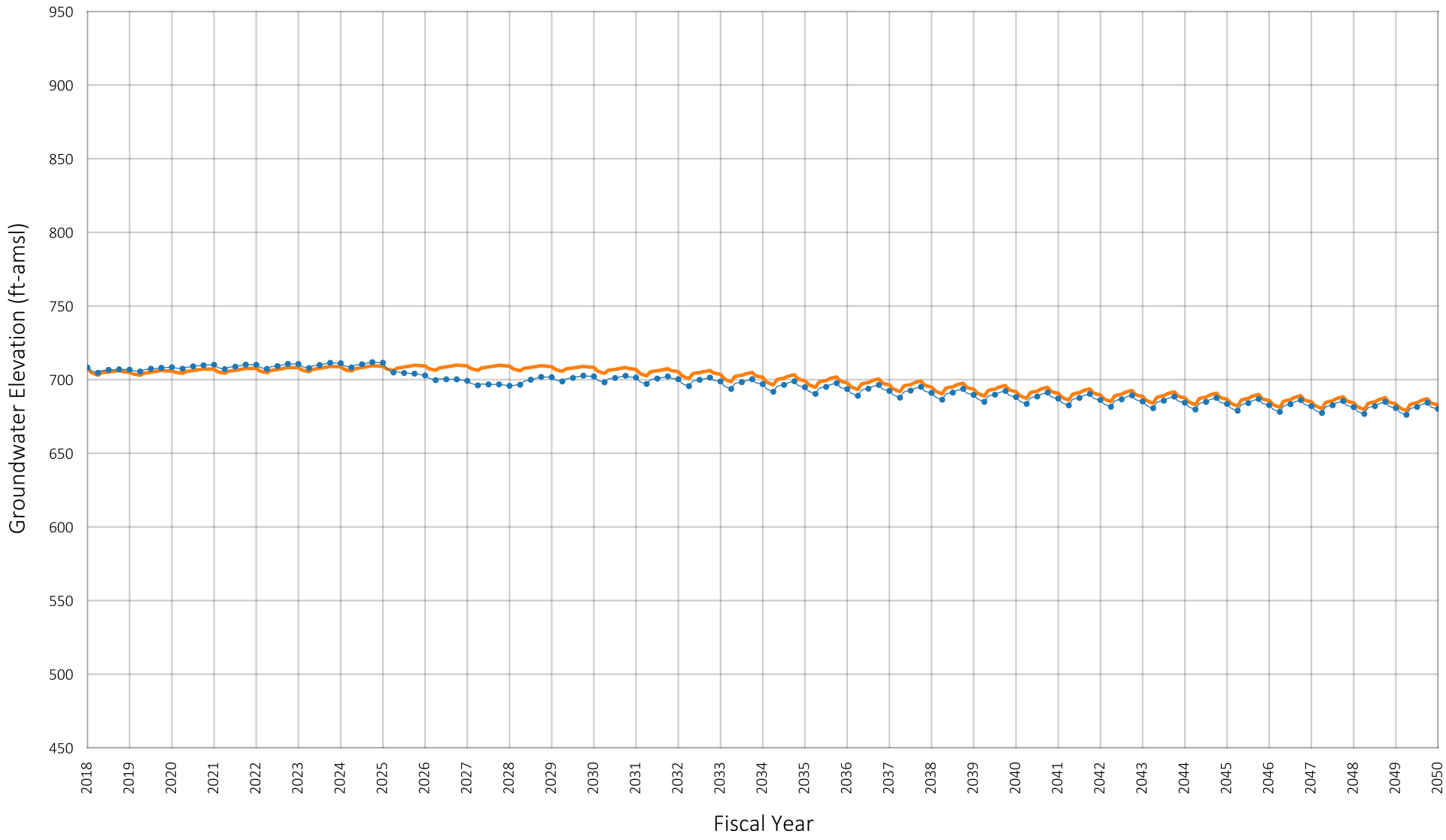
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 9100002
Owner: Cucamonga Valley Water District
Well Name: CB-50

Figure A-33



Location of Well in Chino Basin

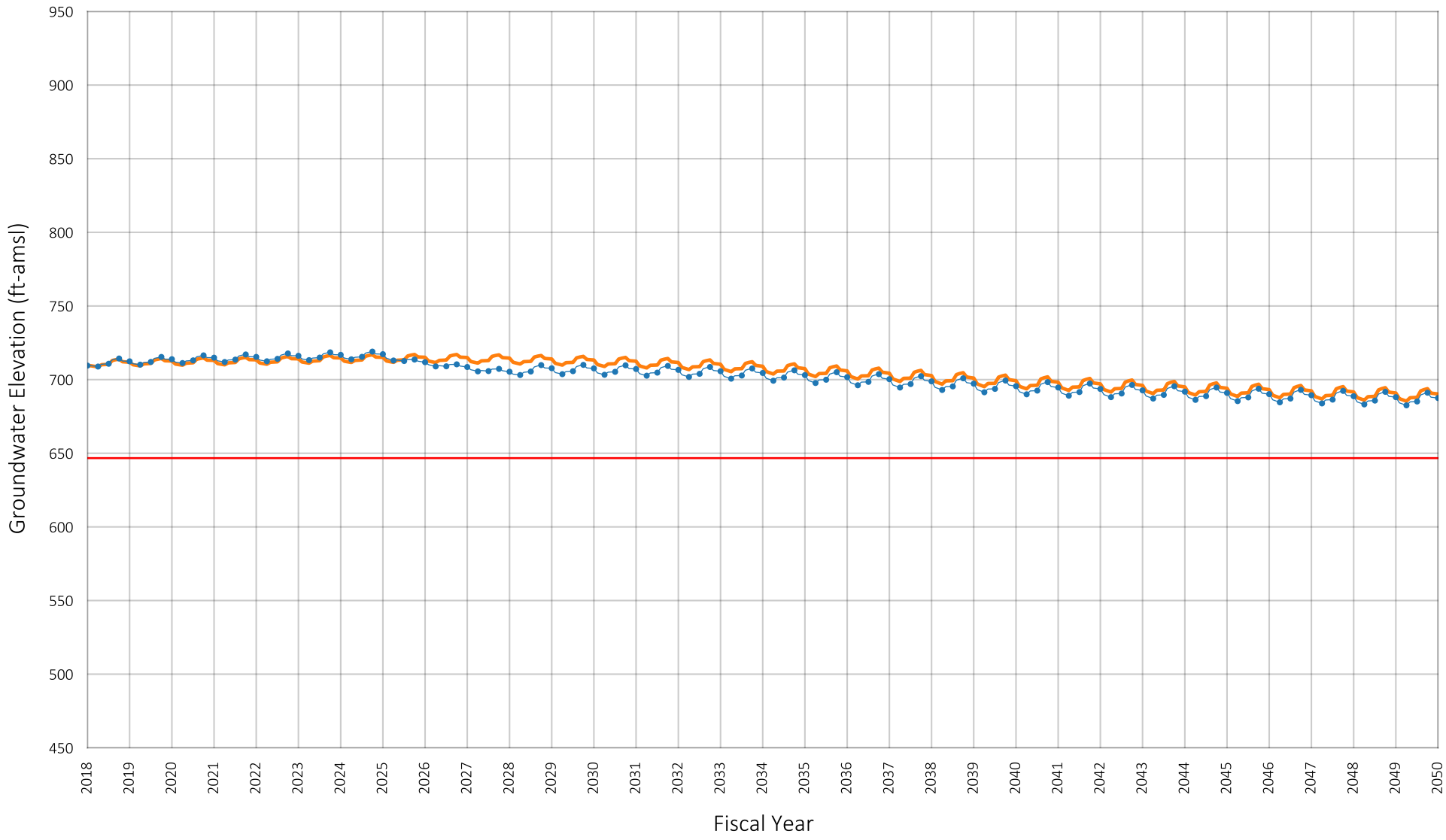
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 9100003
Owner: Cucamonga Valley Water District
Well Name: CB-48

Figure A-34



Location of Well in Chino Basin

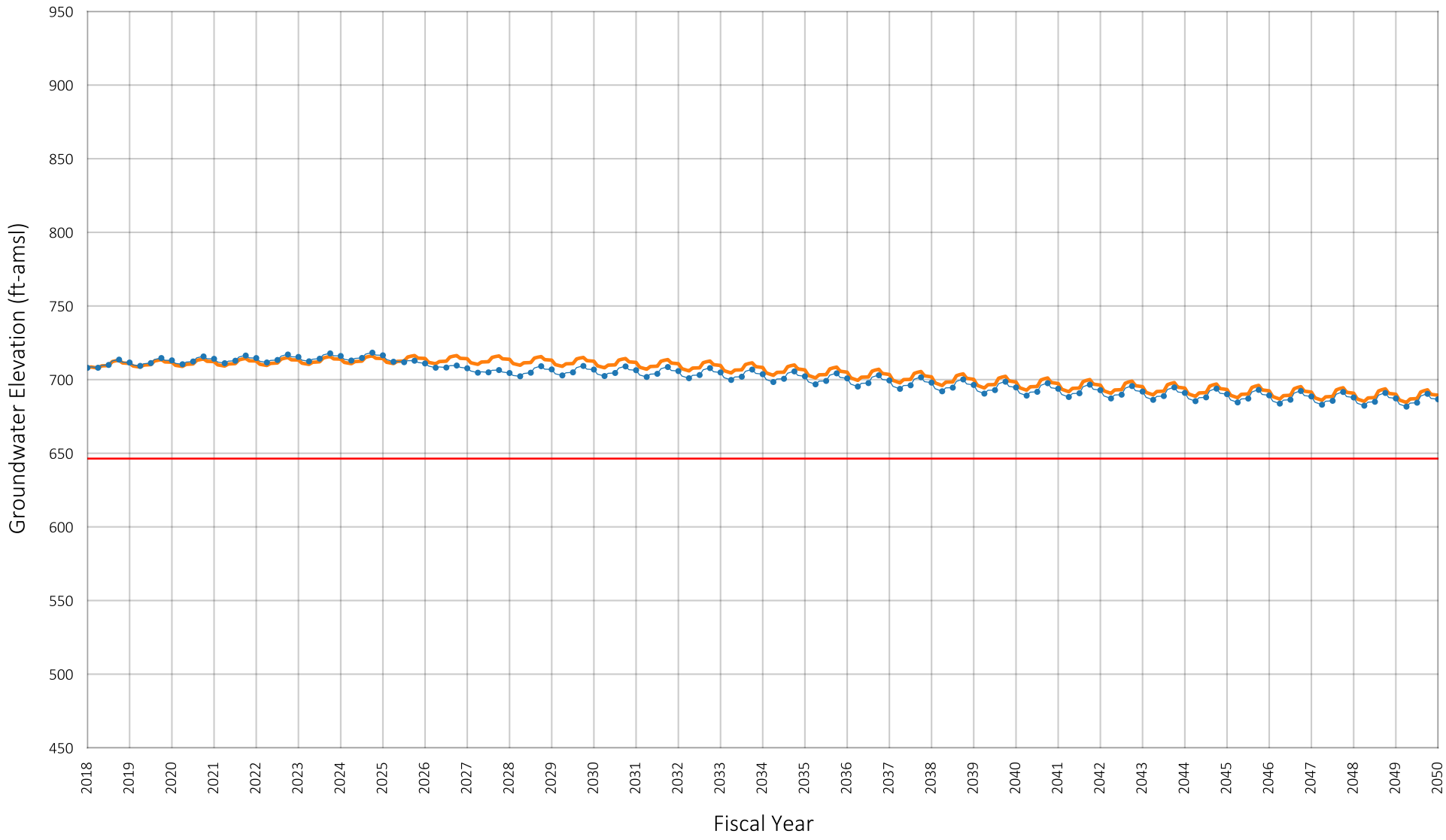
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002211
Owner: Fontana Water Company
Well Name: F7A

Figure A-35



Location of Well in Chino Basin

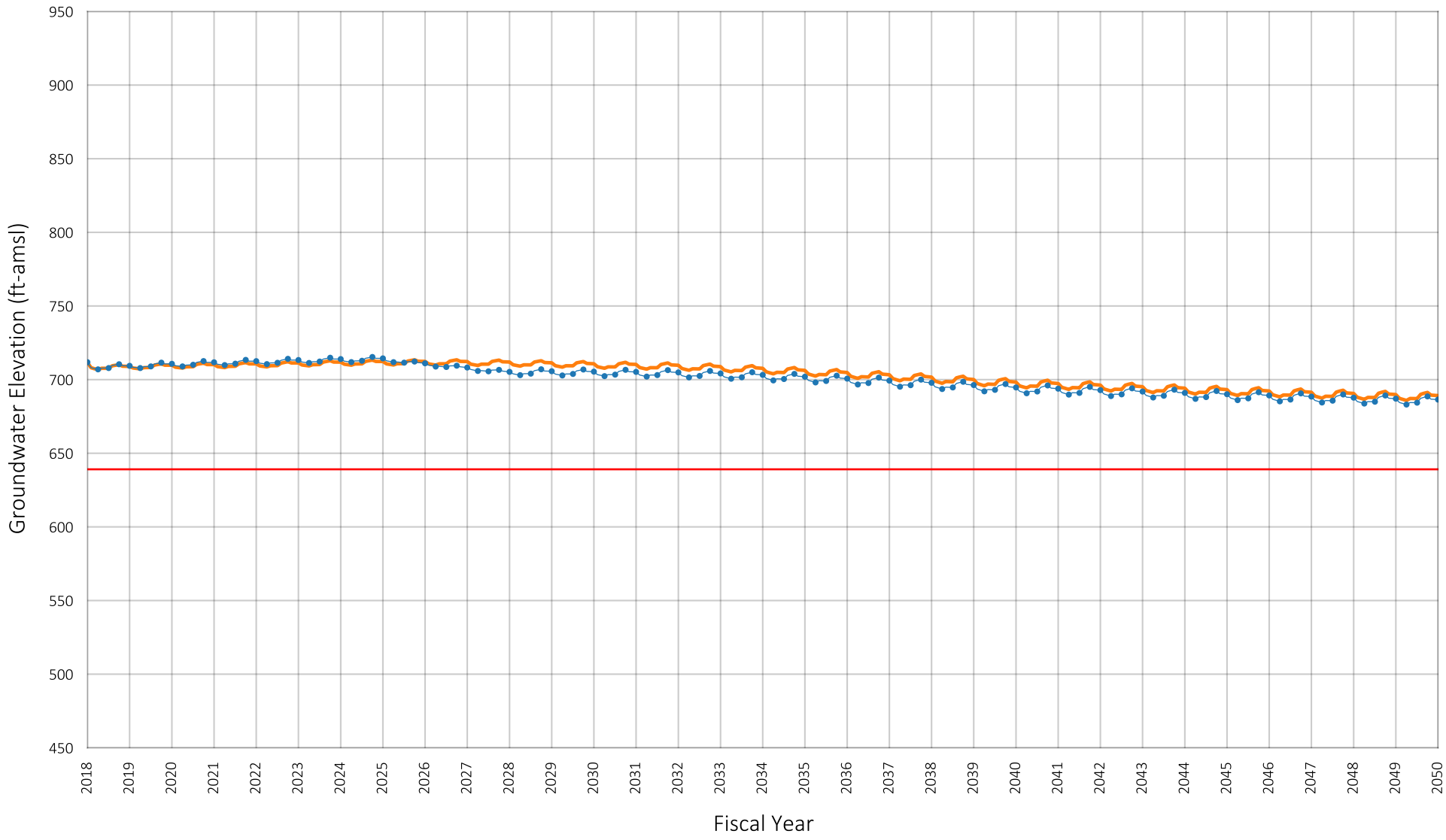
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1221726
Owner: Fontana Water Company
Well Name: F7B

Figure A-36



Location of Well in Chino Basin

SYR1

LSLS

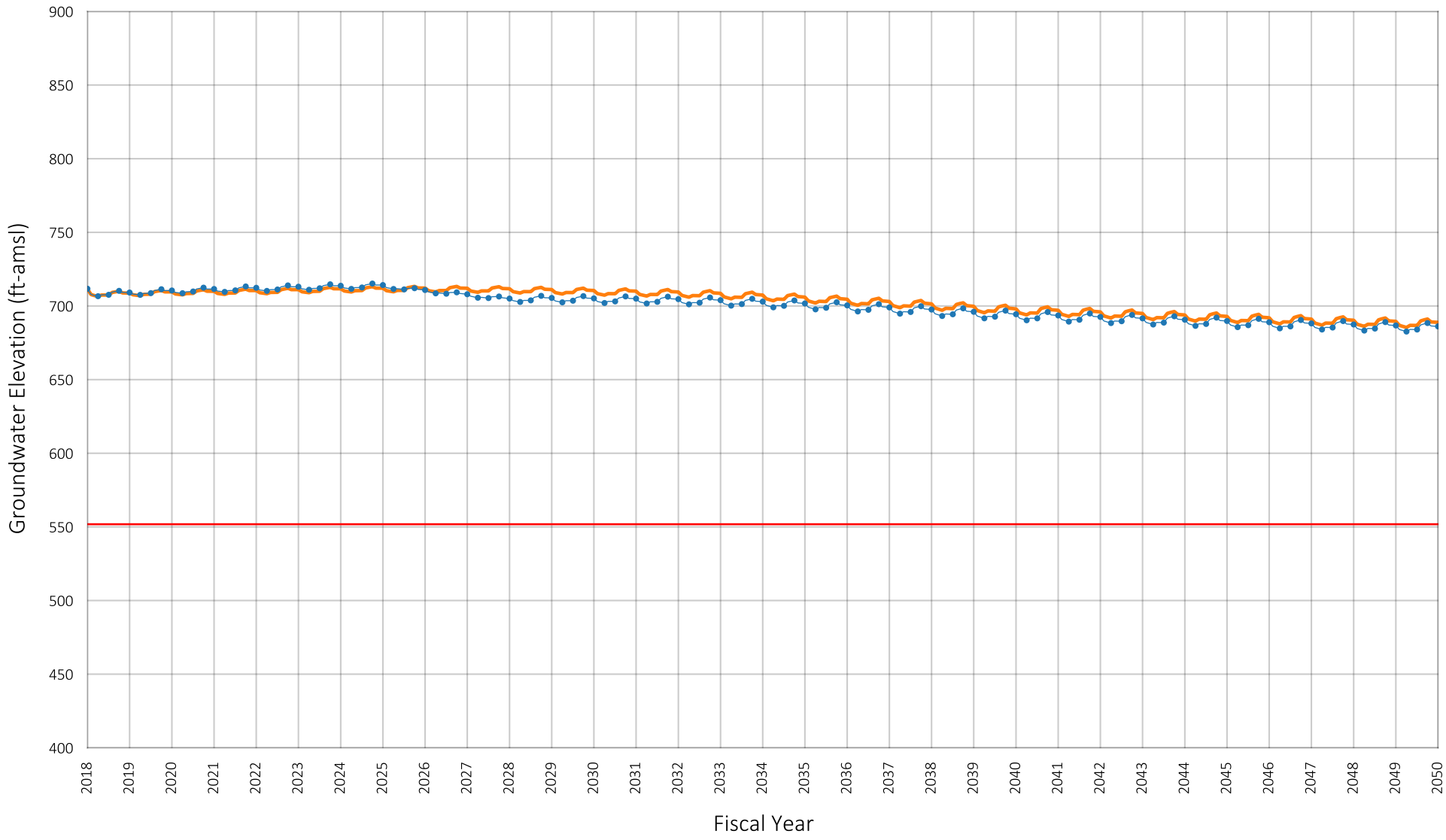
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002237
Owner: Fontana Water Company
Well Name: F17B

Figure A-37



Location of Well in Chino Basin

SYR1

LSLS

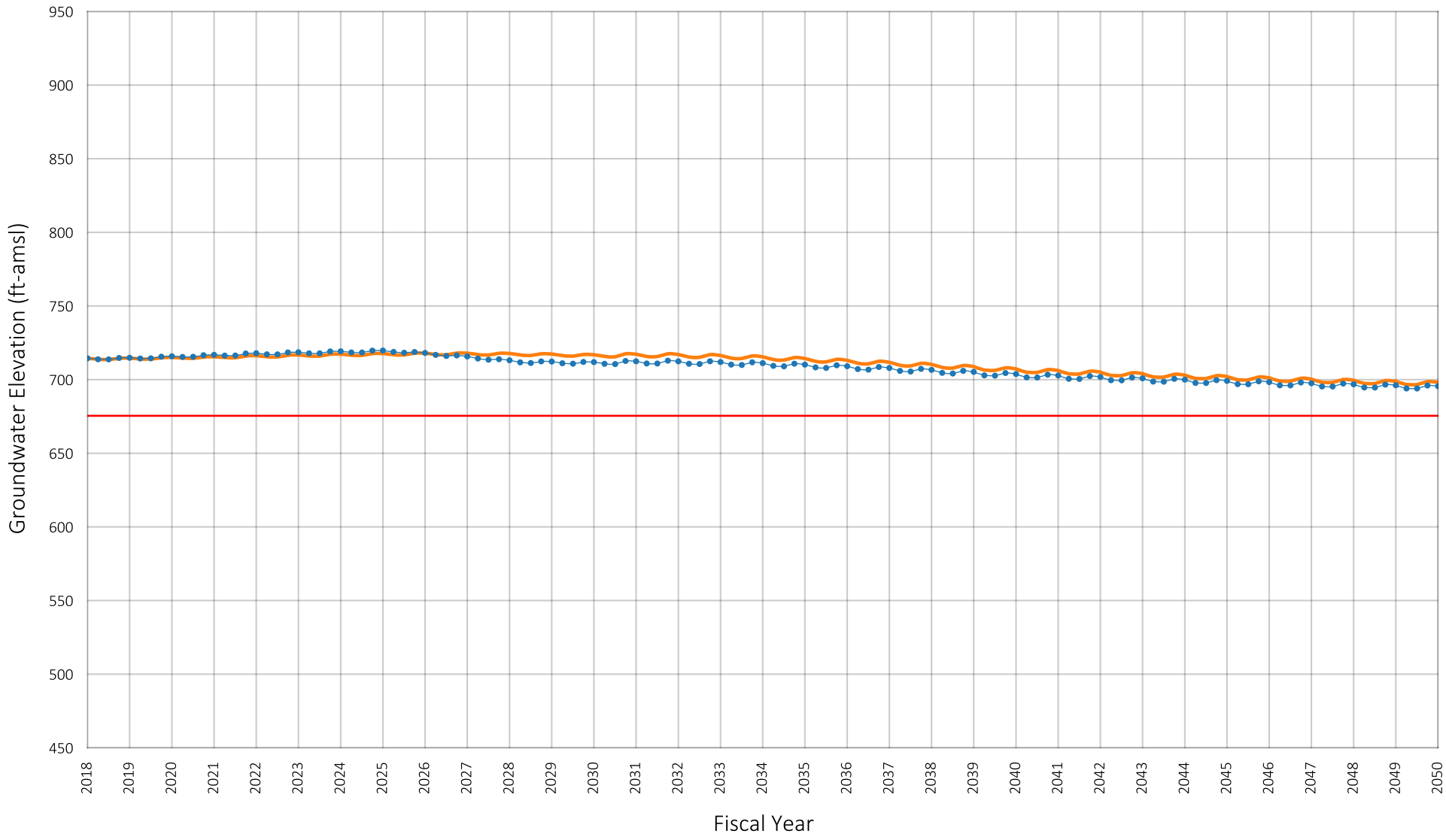
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1201069
Owner: Fontana Water Company
Well Name: F17C

Figure A-38



Location of Well in Chino Basin

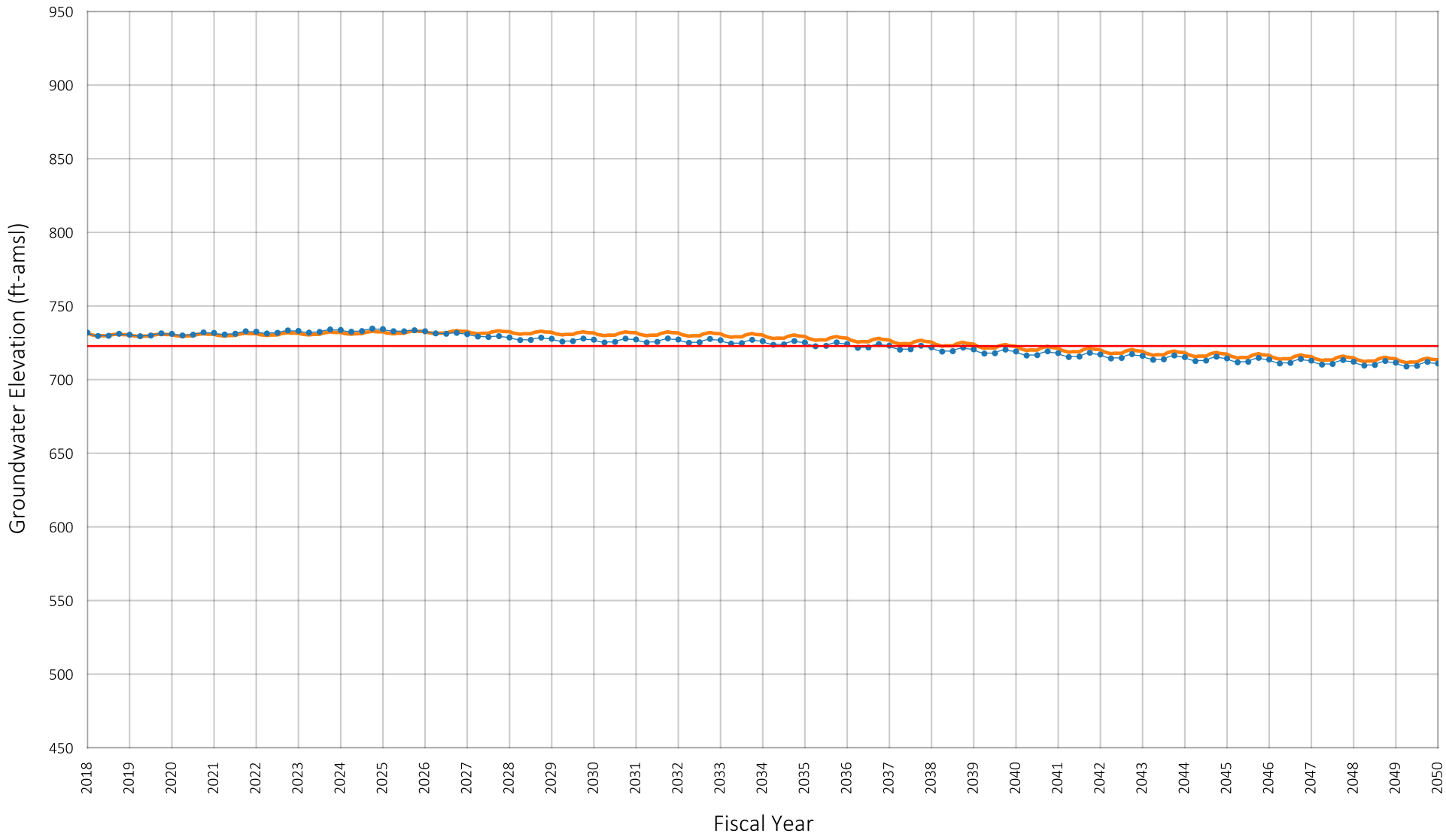
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1232847
Owner: Fontana Water Company
Well Name: F21B

Figure A-39



Location of Well in Chino Basin

SYR1

LSLS

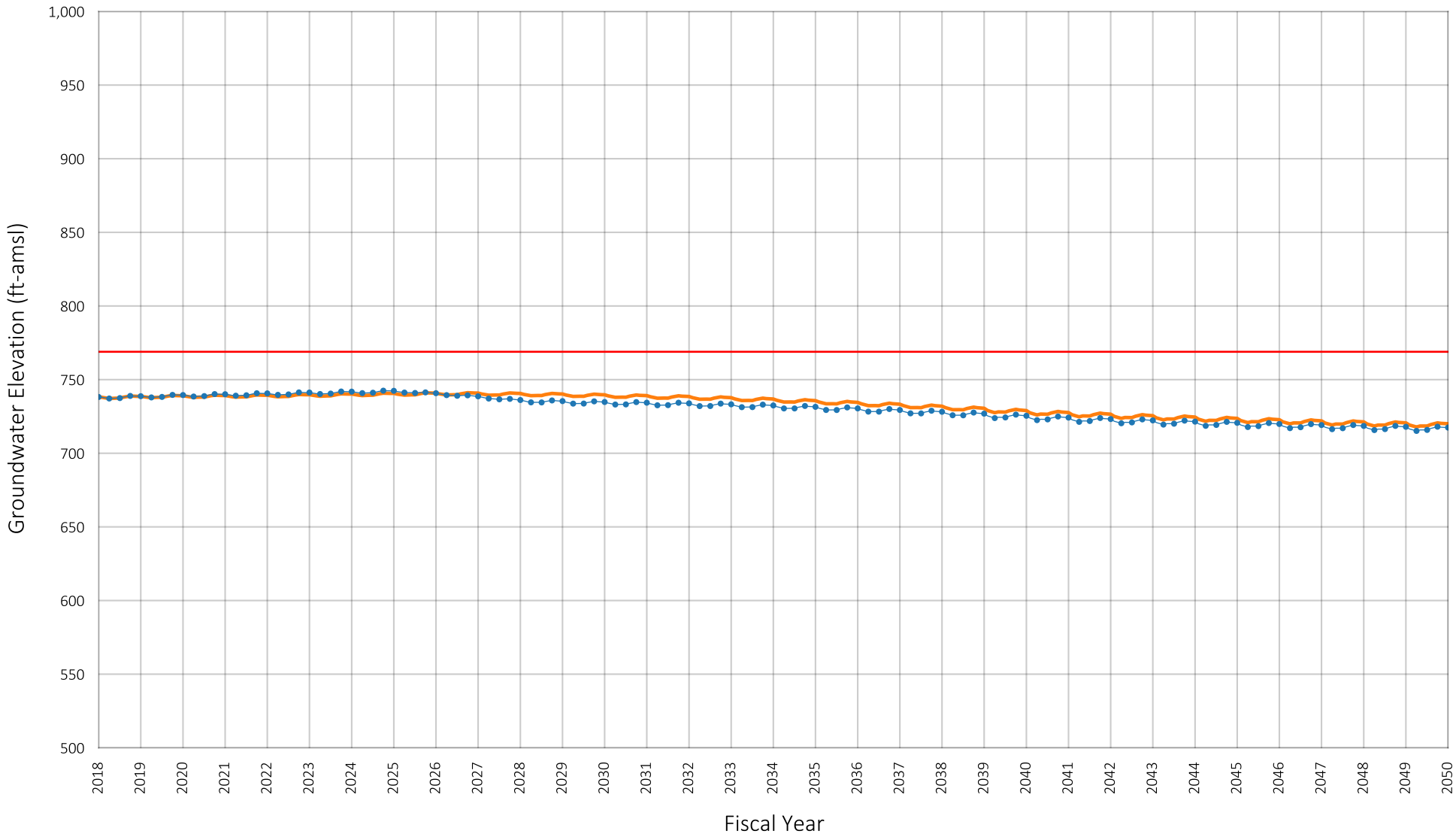
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002239
Owner: Fontana Water Company
Well Name: F23A

Figure A-40



Location of Well in Chino Basin

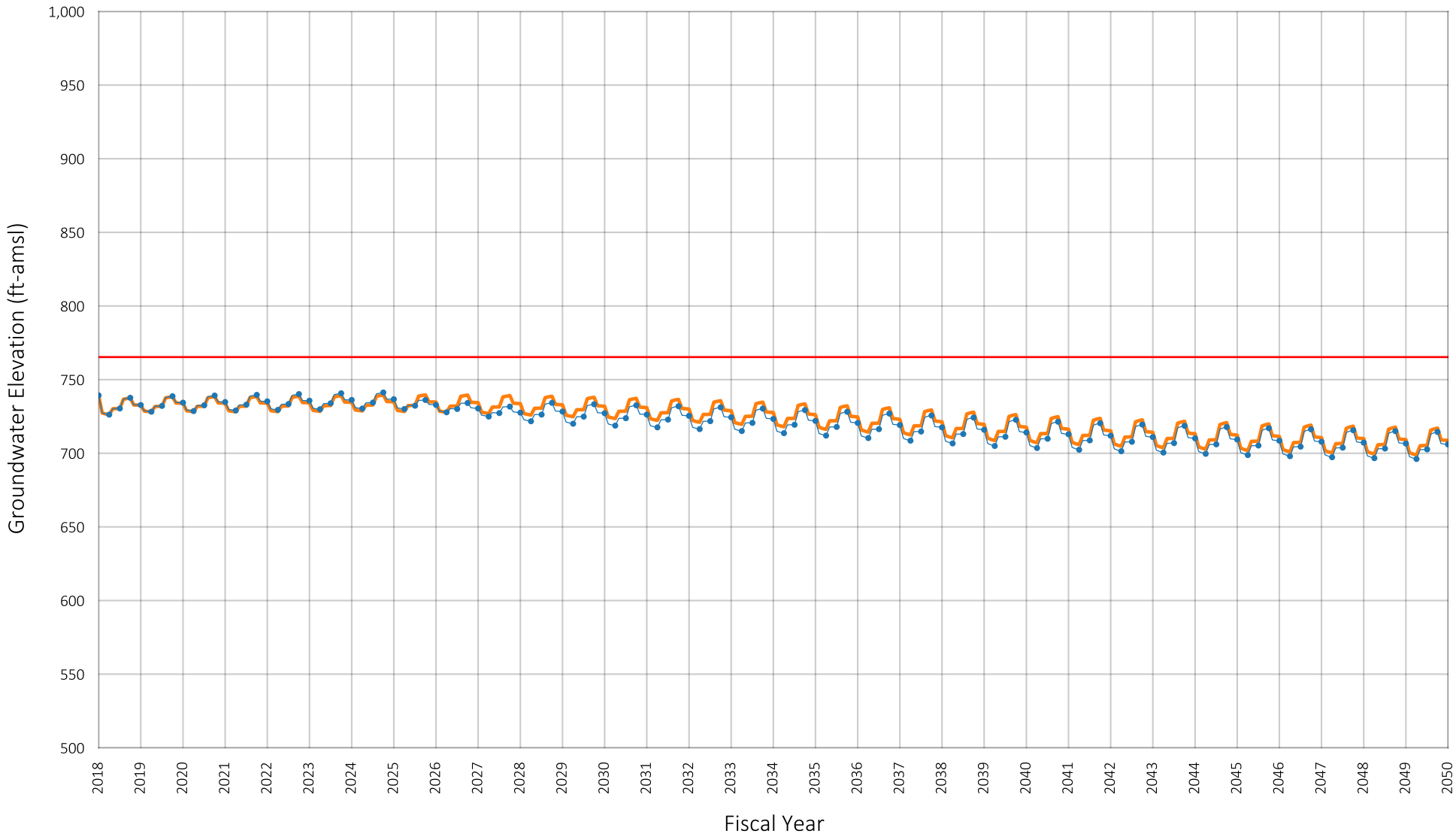
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1200218
Owner: Fontana Water Company
Well Name: F24A

Figure A-41



Location of Well in Chino Basin

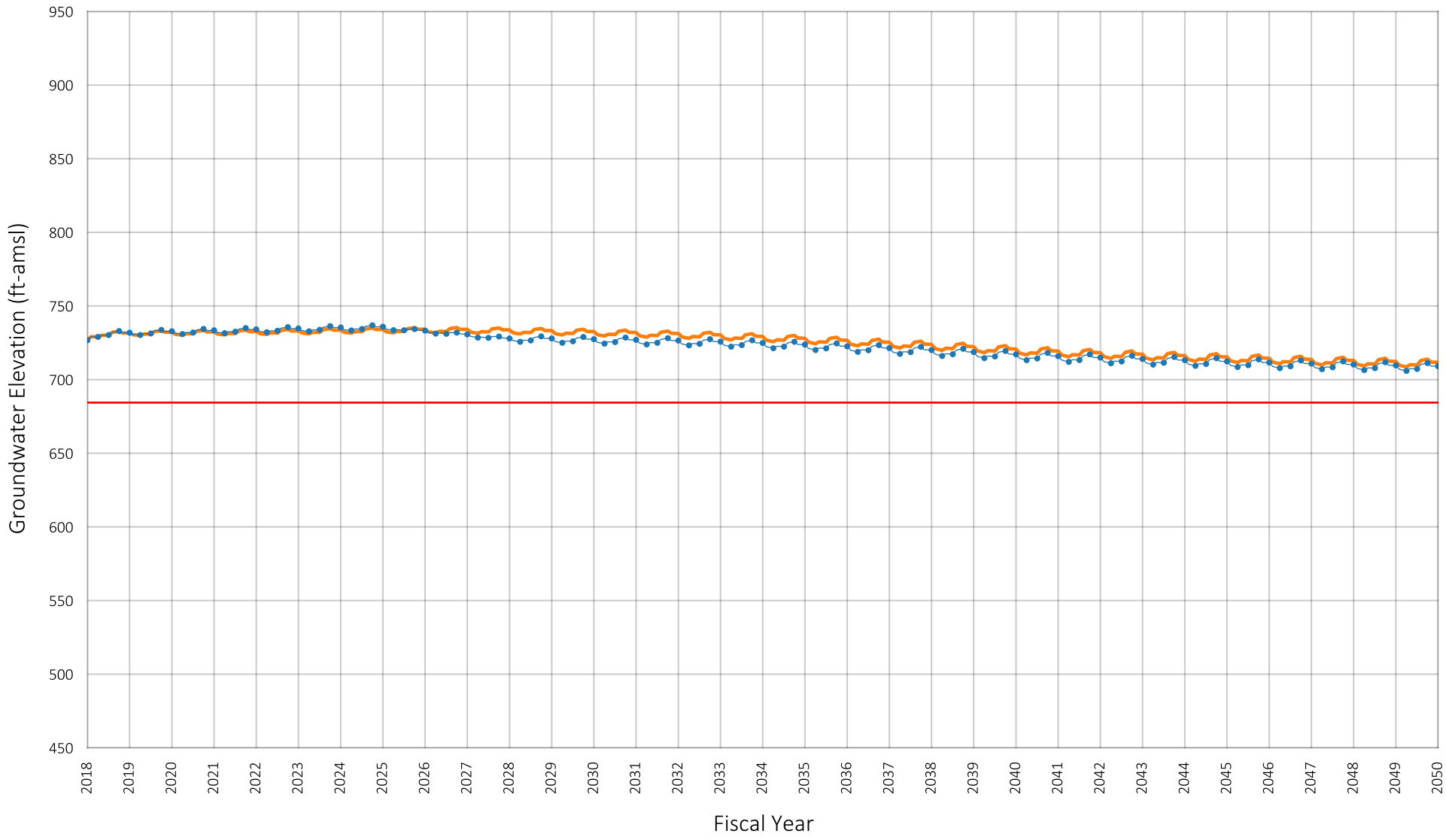
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1200219
Owner: Fontana Water Company
Well Name: F26A

Figure A-42



Location of Well in Chino Basin

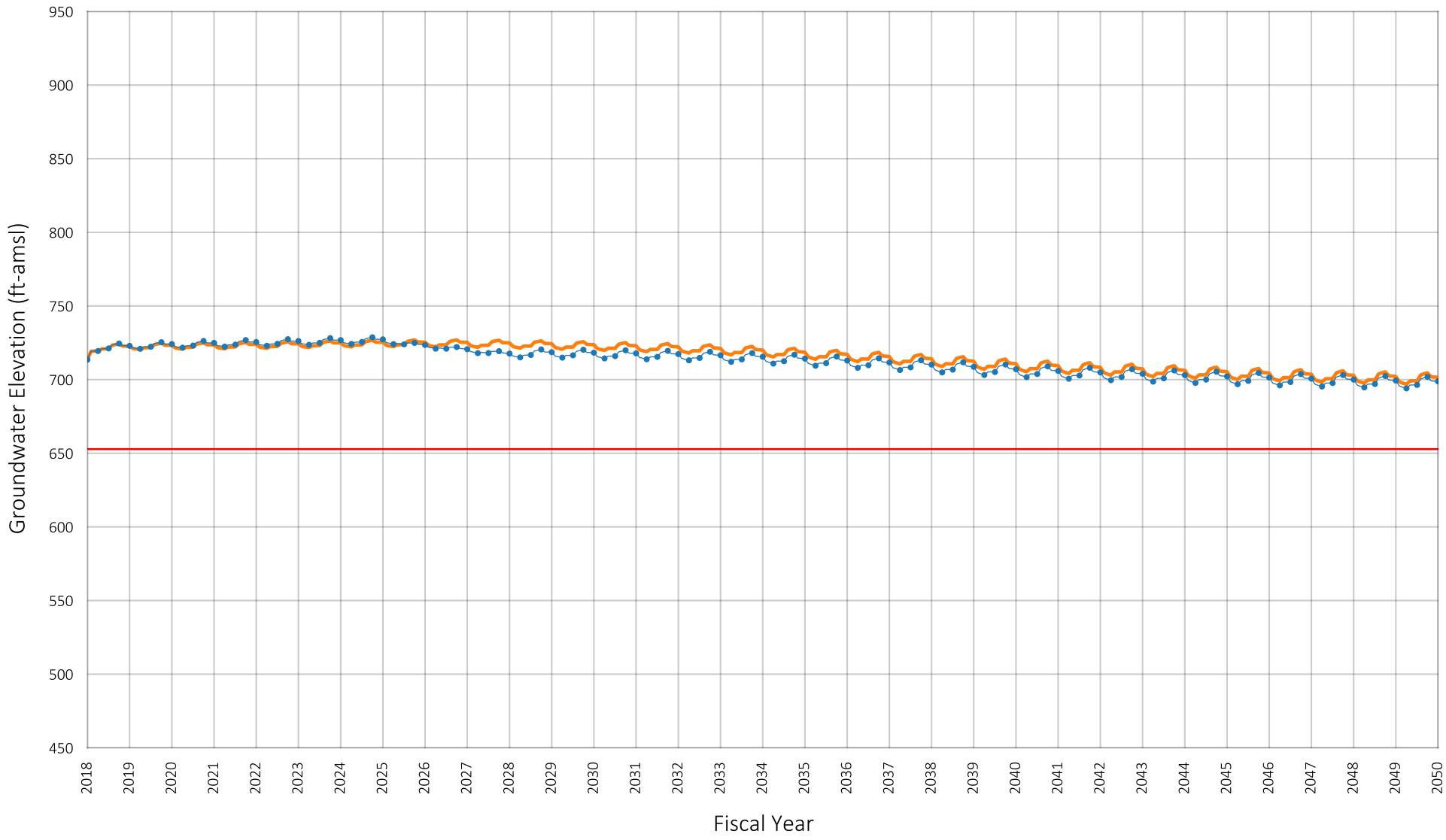
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002081
Owner: Fontana Water Company
Well Name: F31A

Figure A-43



Location of Well in Chino Basin

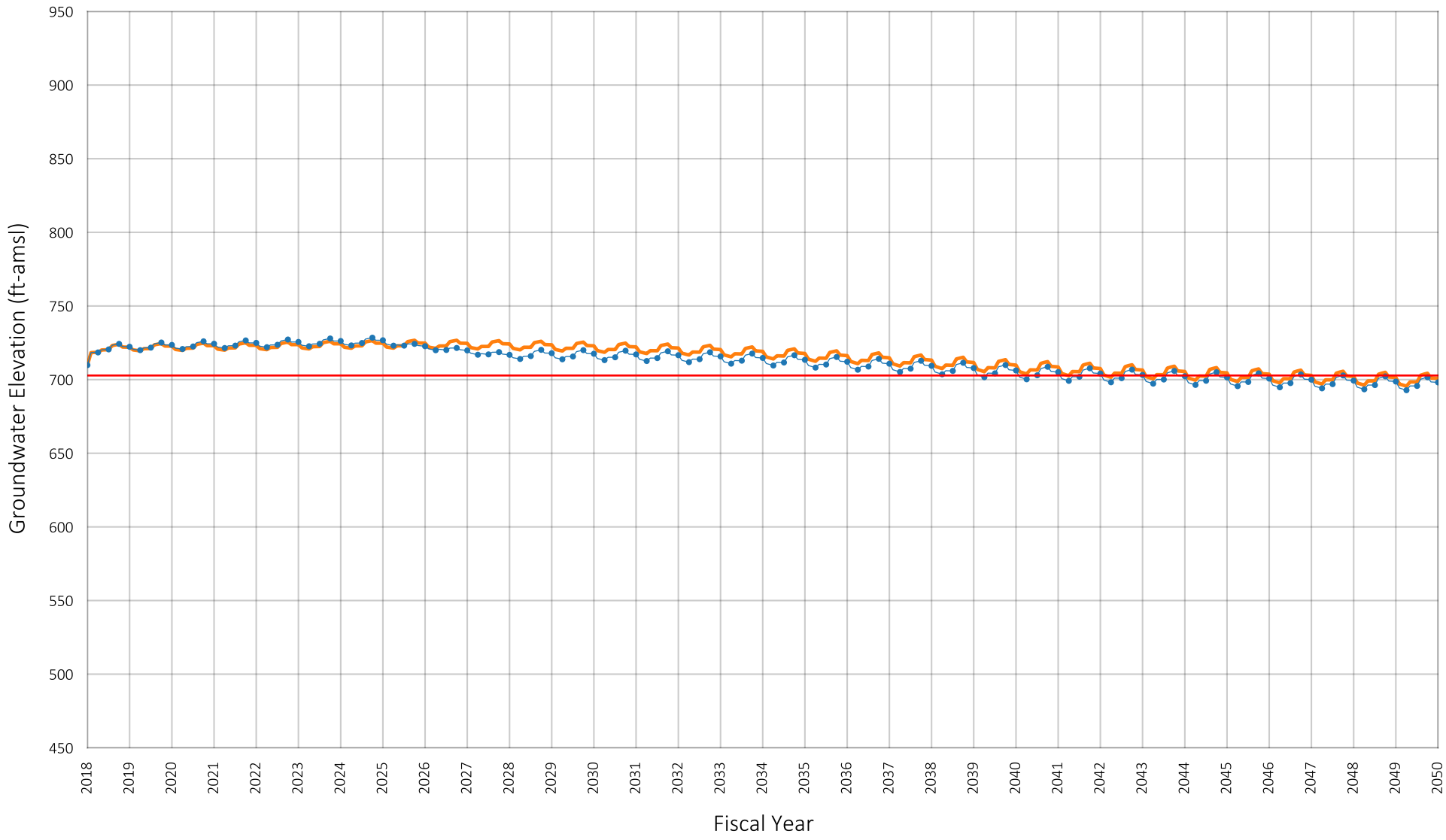
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206933
Owner: Fontana Water Company
Well Name: F44A

Figure A-44



Location of Well in Chino Basin

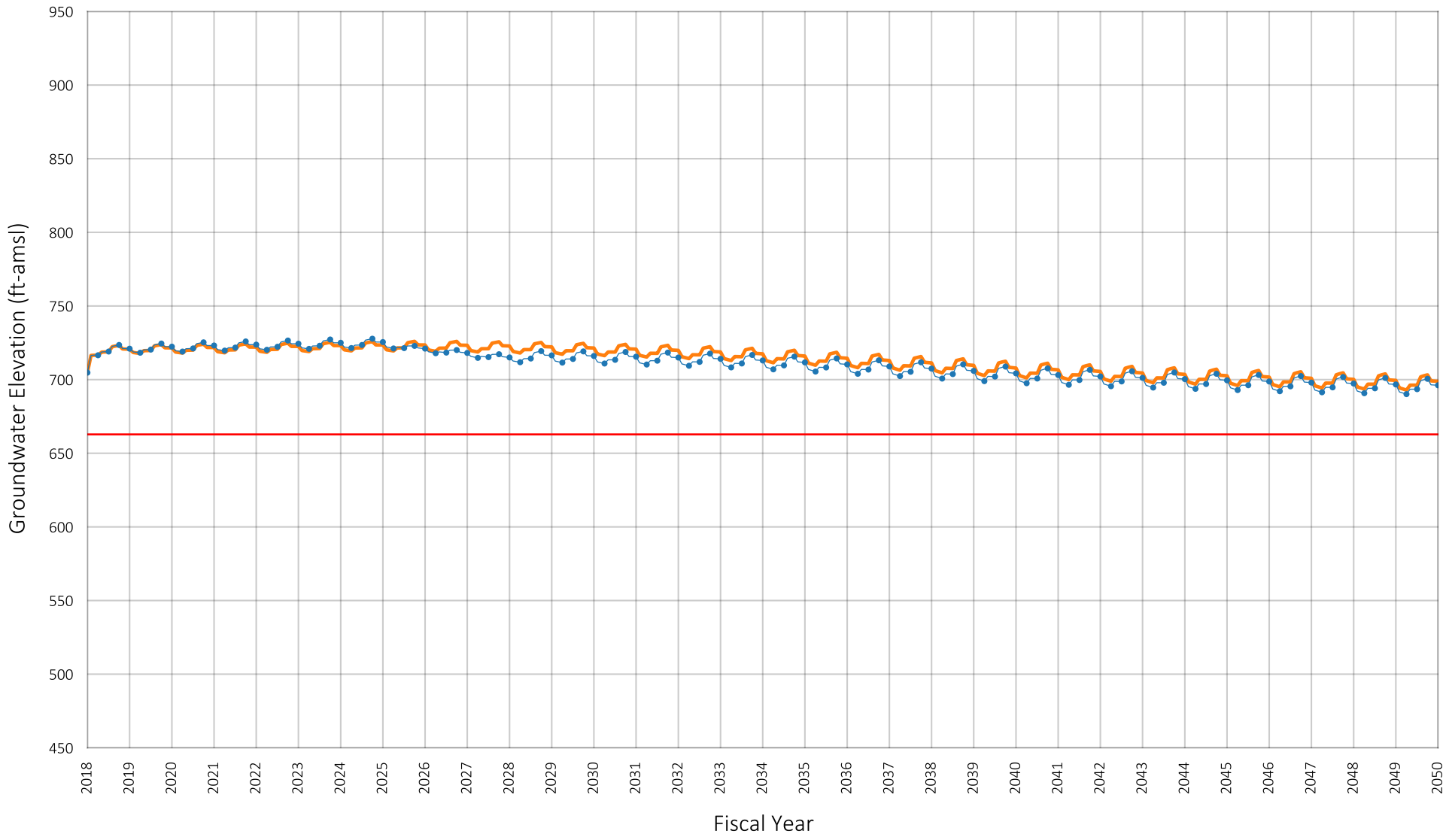
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207340
Owner: Fontana Water Company
Well Name: F44B

Figure A-45



Location of Well in Chino Basin

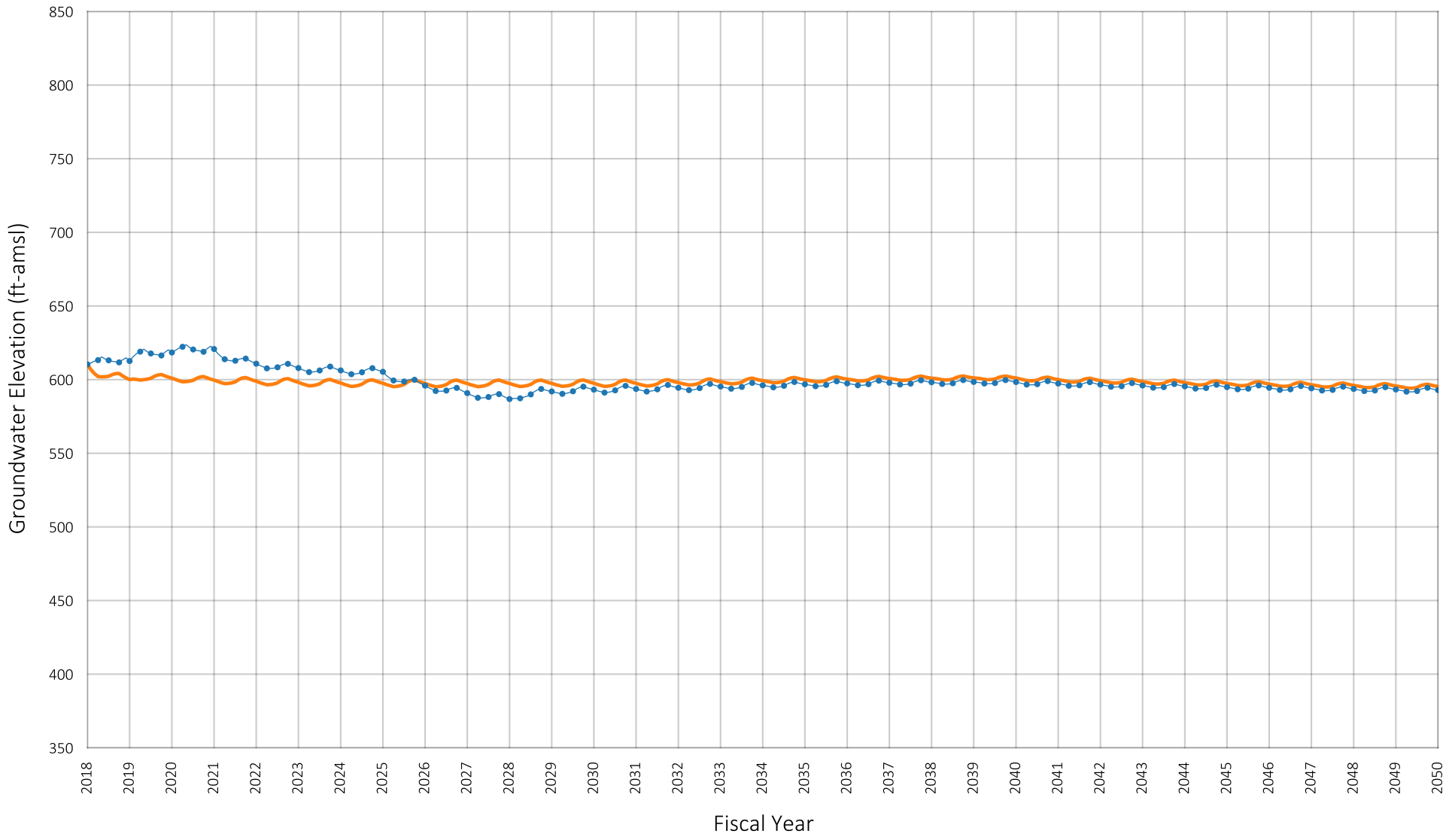
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207341
Owner: Fontana Water Company
Well Name: F44C

Figure A-46



Location of Well in Chino Basin

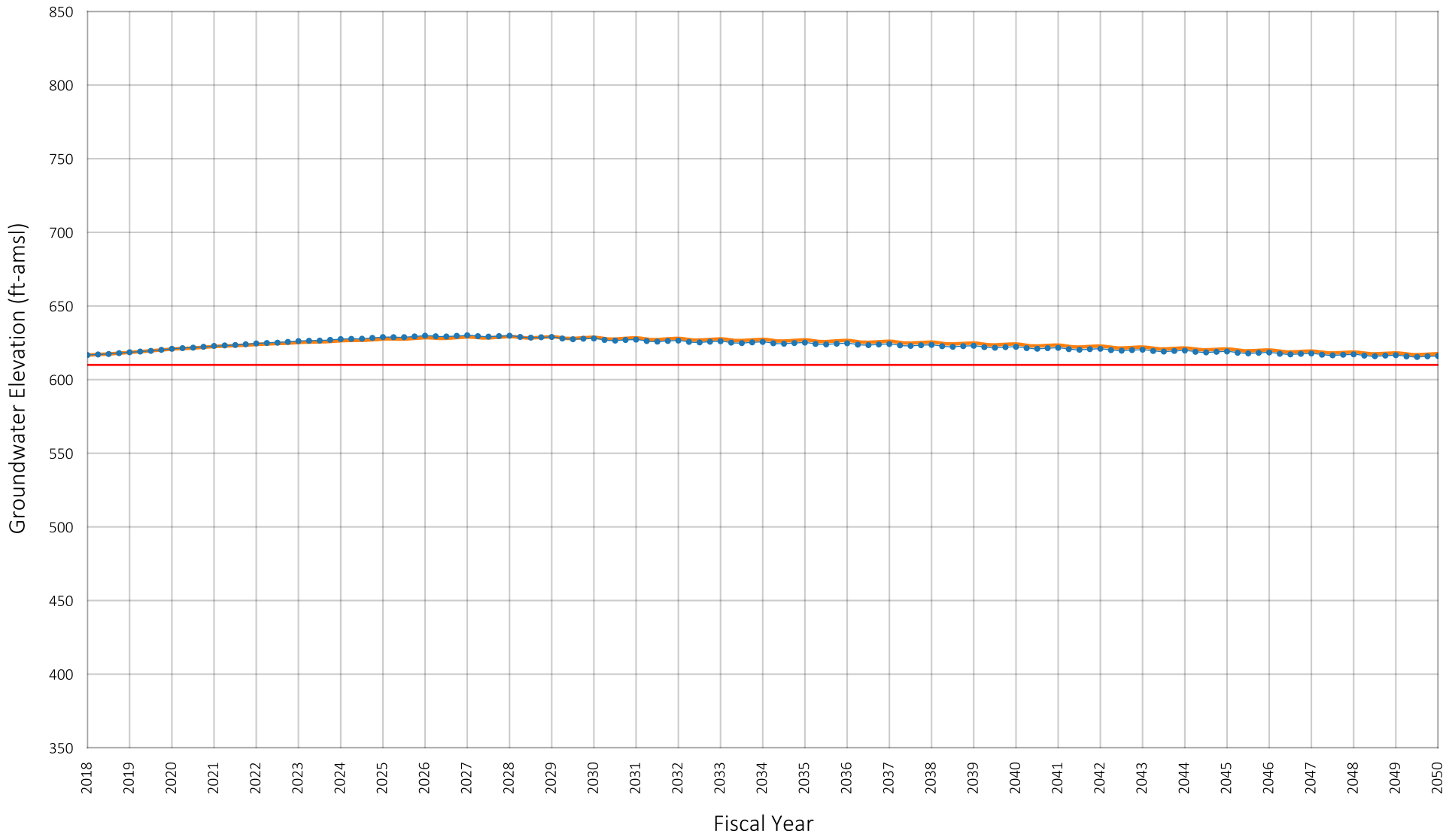
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002554
Owner: Golden State Water Company
Well Name: Margarita #1

Figure A-47



Location of Well in Chino Basin

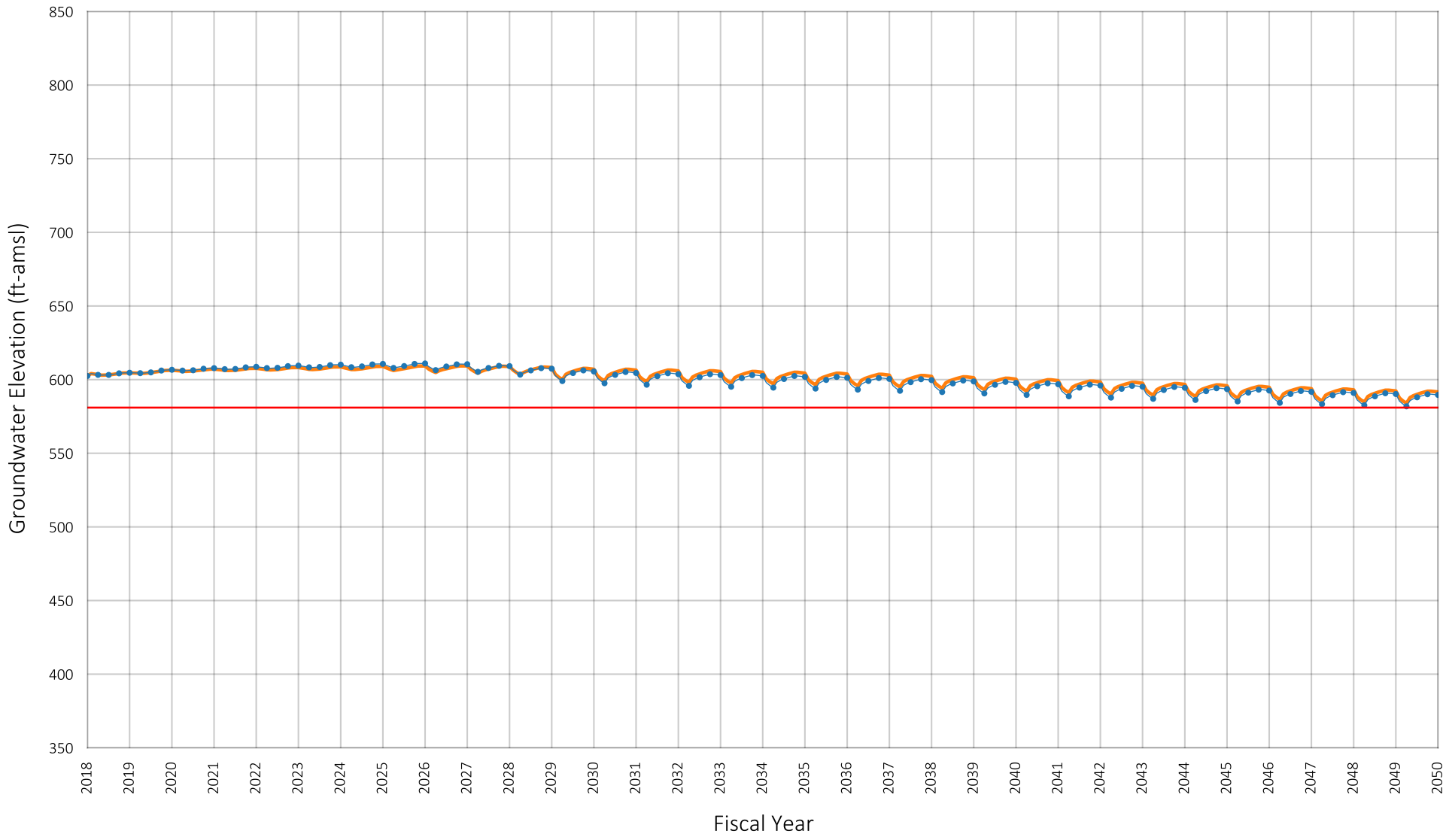
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003470
Owner: Jurupa Community Services District
Well Name: 6

Figure A-48



Location of Well in Chino Basin

SYR1

LSLS

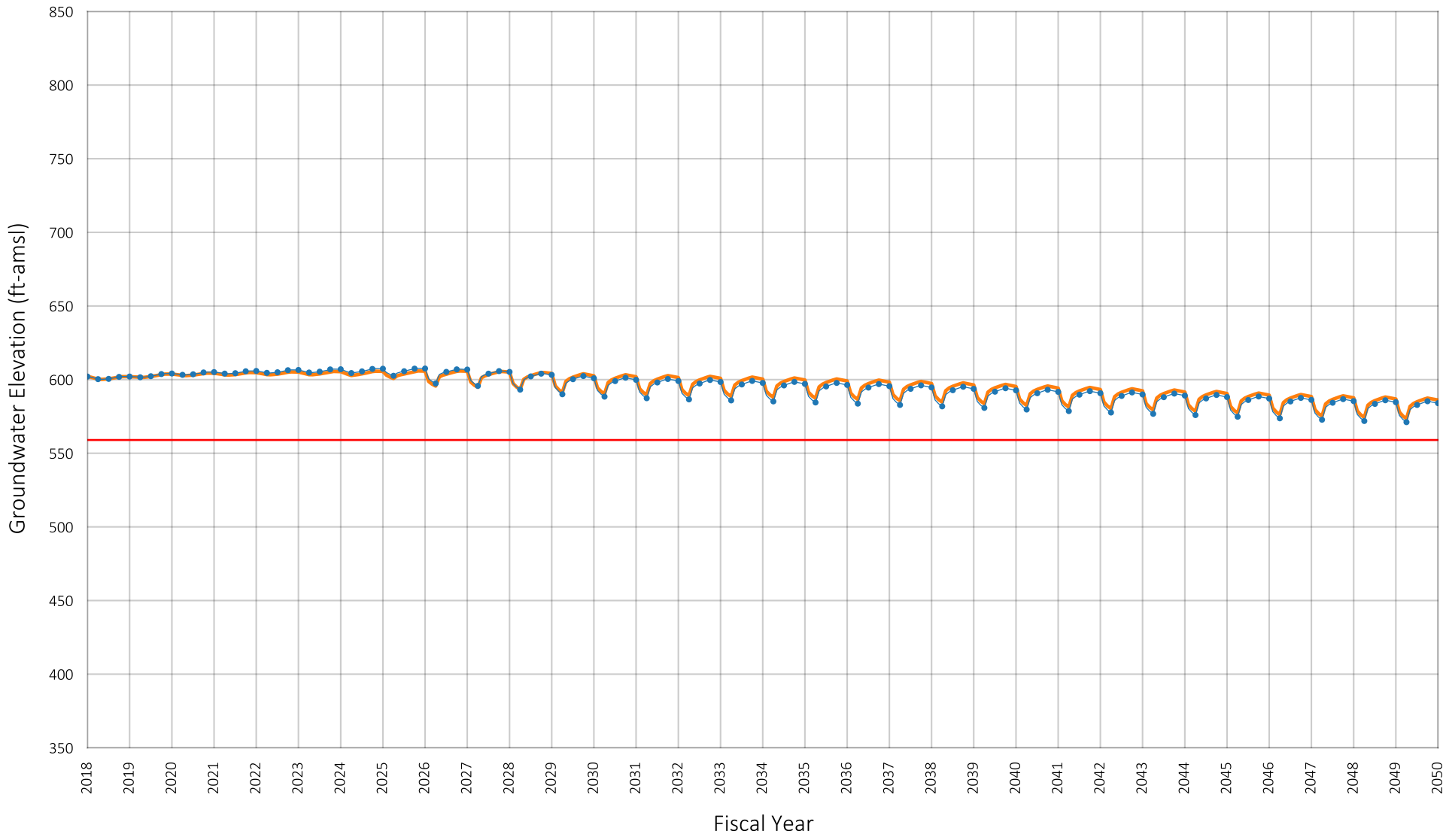
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003507
Owner: Jurupa Community Services District
Well Name: 8

Figure A-49



Location of Well in Chino Basin

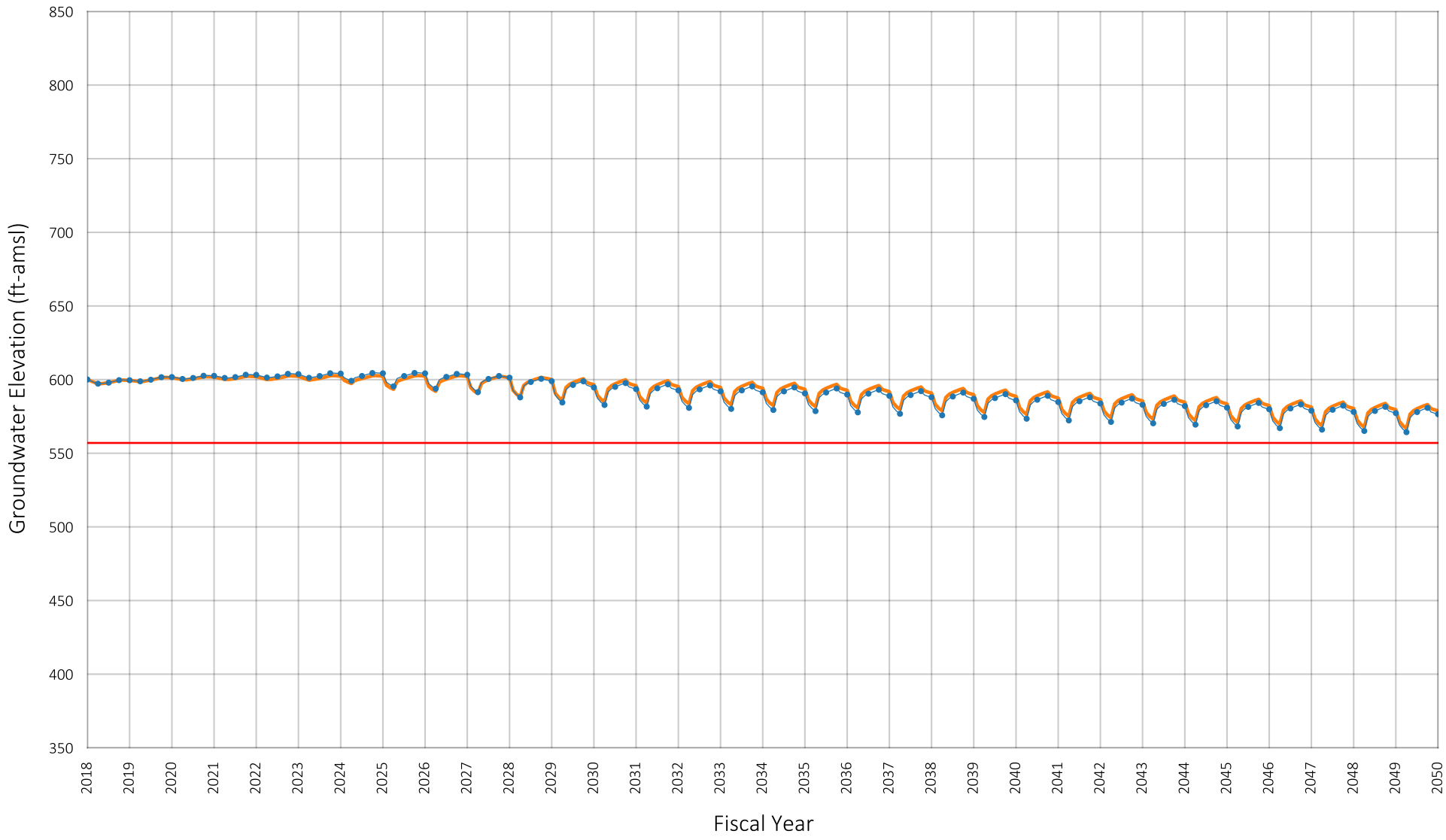
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003506
Owner: Jurupa Community Services District
Well Name: 11

Figure A-50



Location of Well in Chino Basin

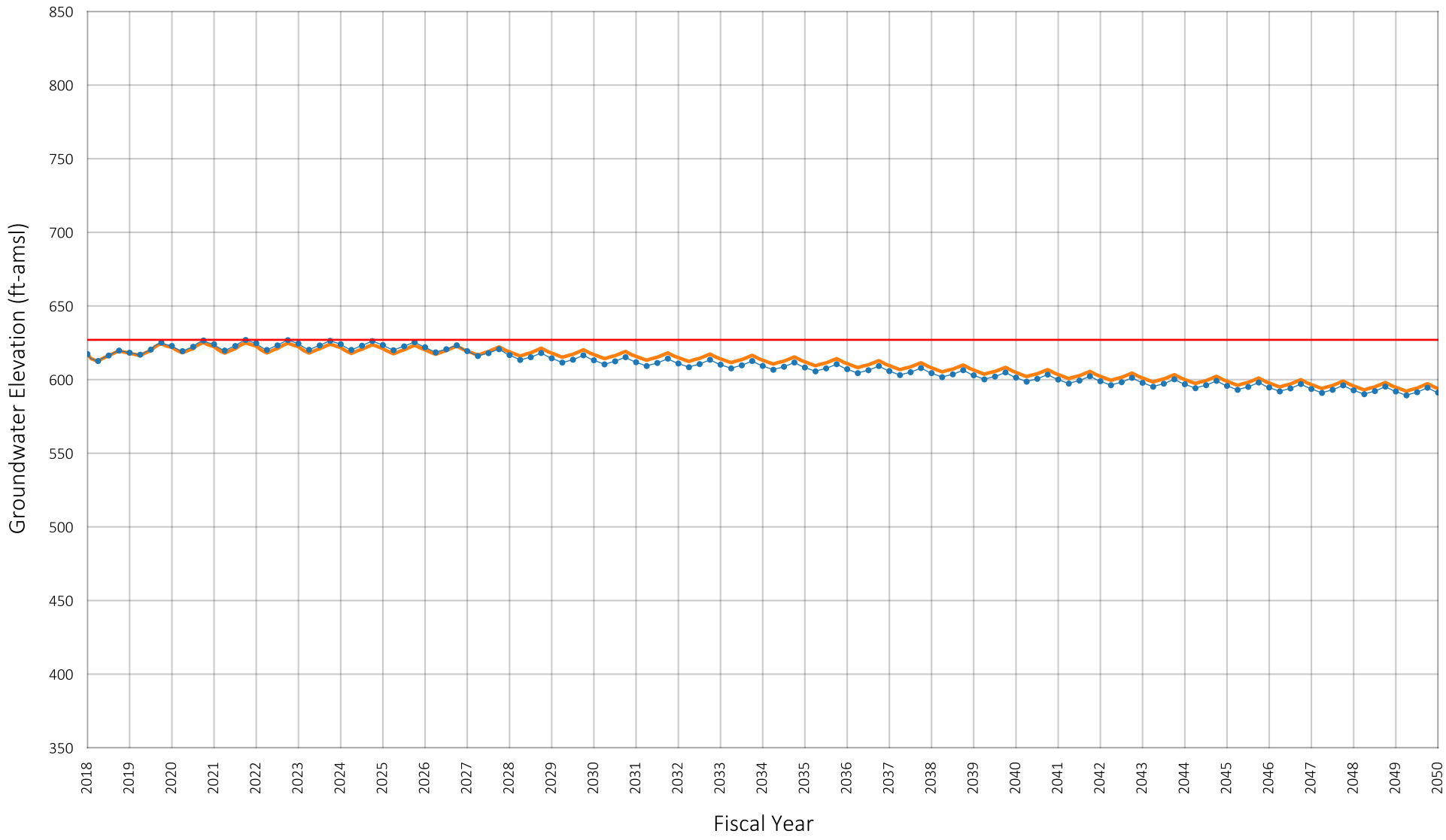
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003505
Owner: Jurupa Community Services District
Well Name: 12

Figure A-51



Location of Well in Chino Basin

SYR1

LSLS

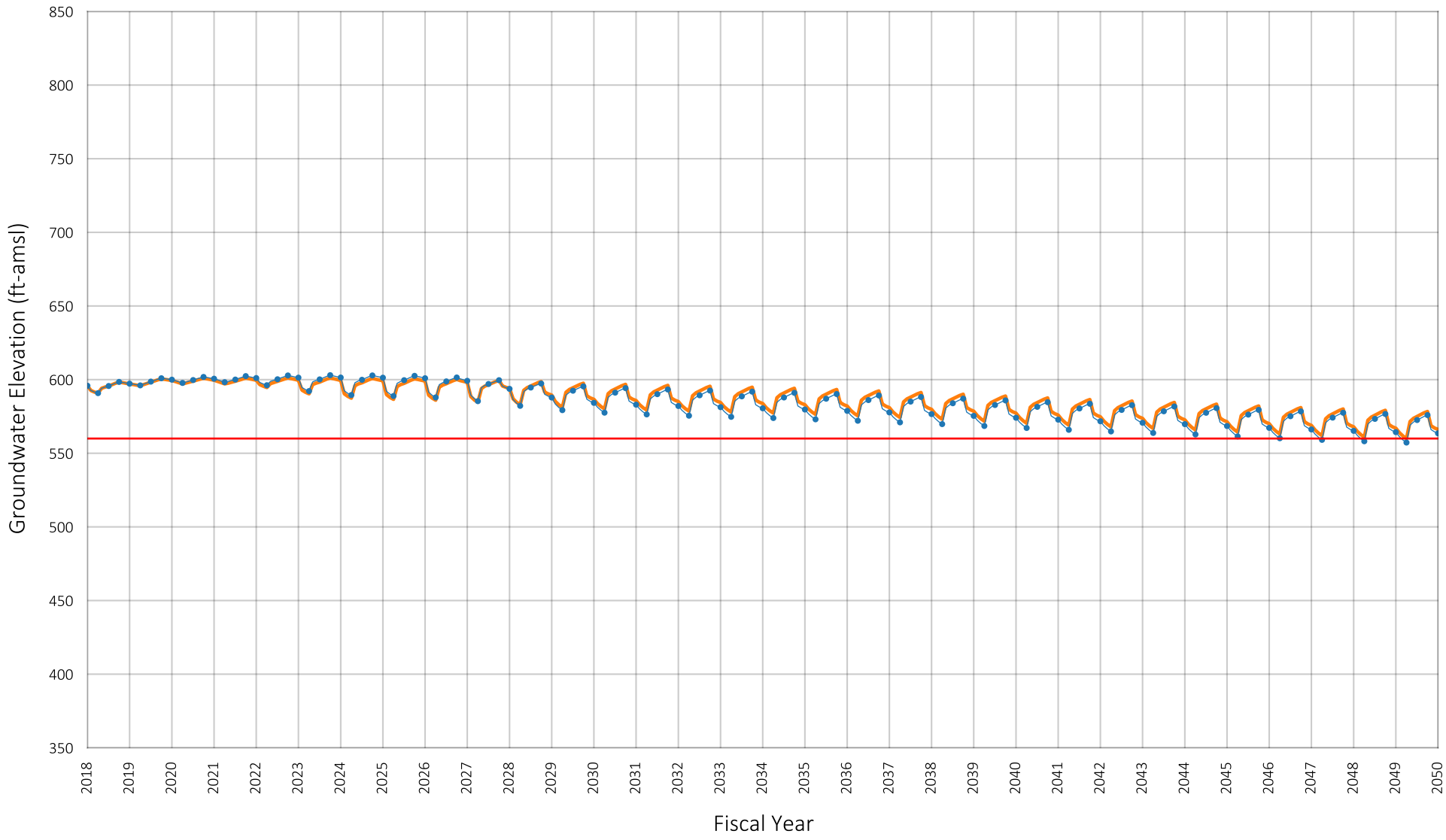
Pumping Sustainability Metric Elevation

Projected Groundwater Elevation
Well ID#: 1003466
Owner: Jurupa Community Services District
Well Name: 13

Prepared by:

WEST YOST
Water. Engineered.

Figure A-52



Location of Well in Chino Basin

SYR1

LSLS

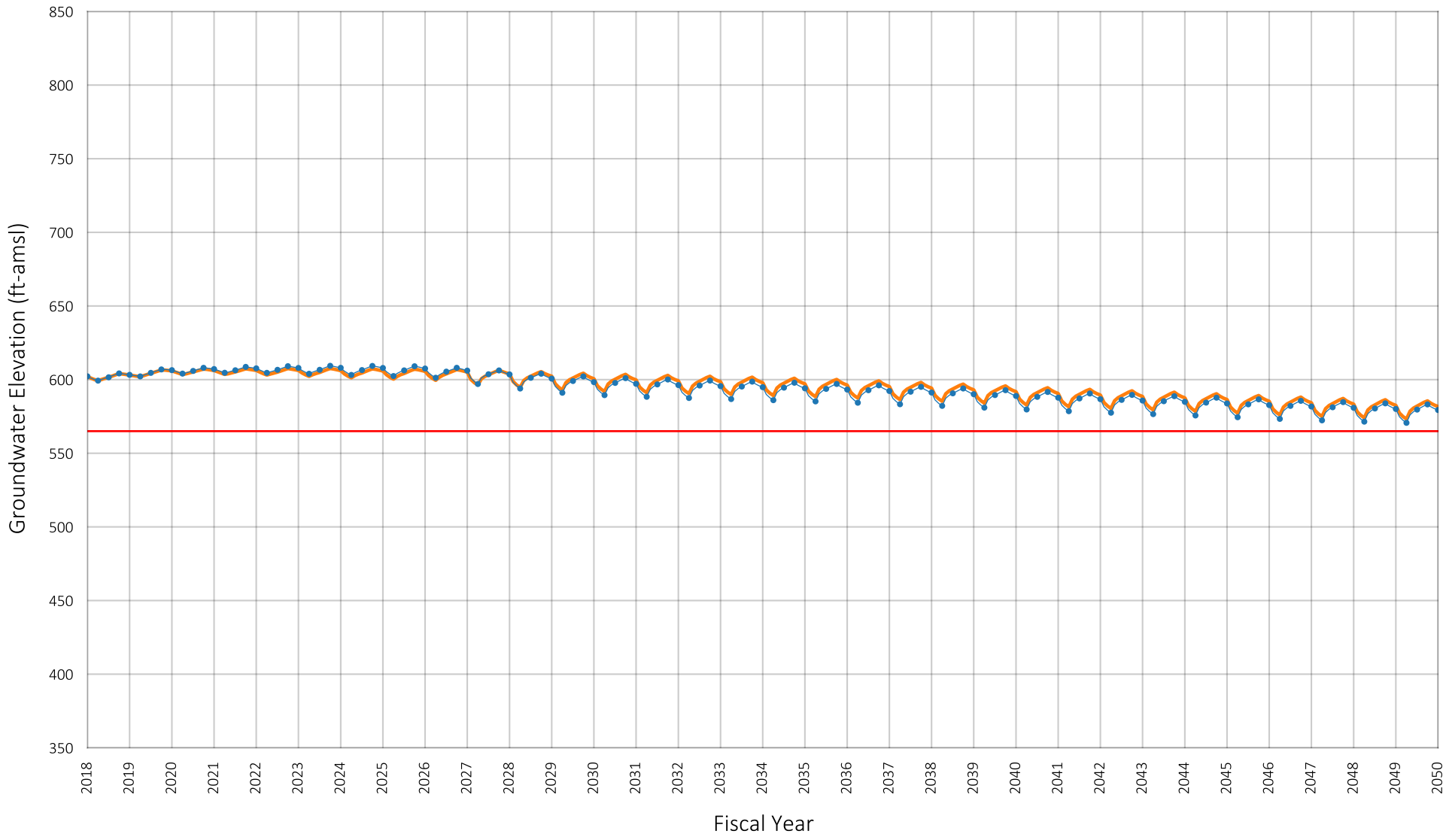
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003501
Owner: Jurupa Community Services District
Well Name: 14

Figure A-53



Location of Well in Chino Basin

SYR1

LSLS

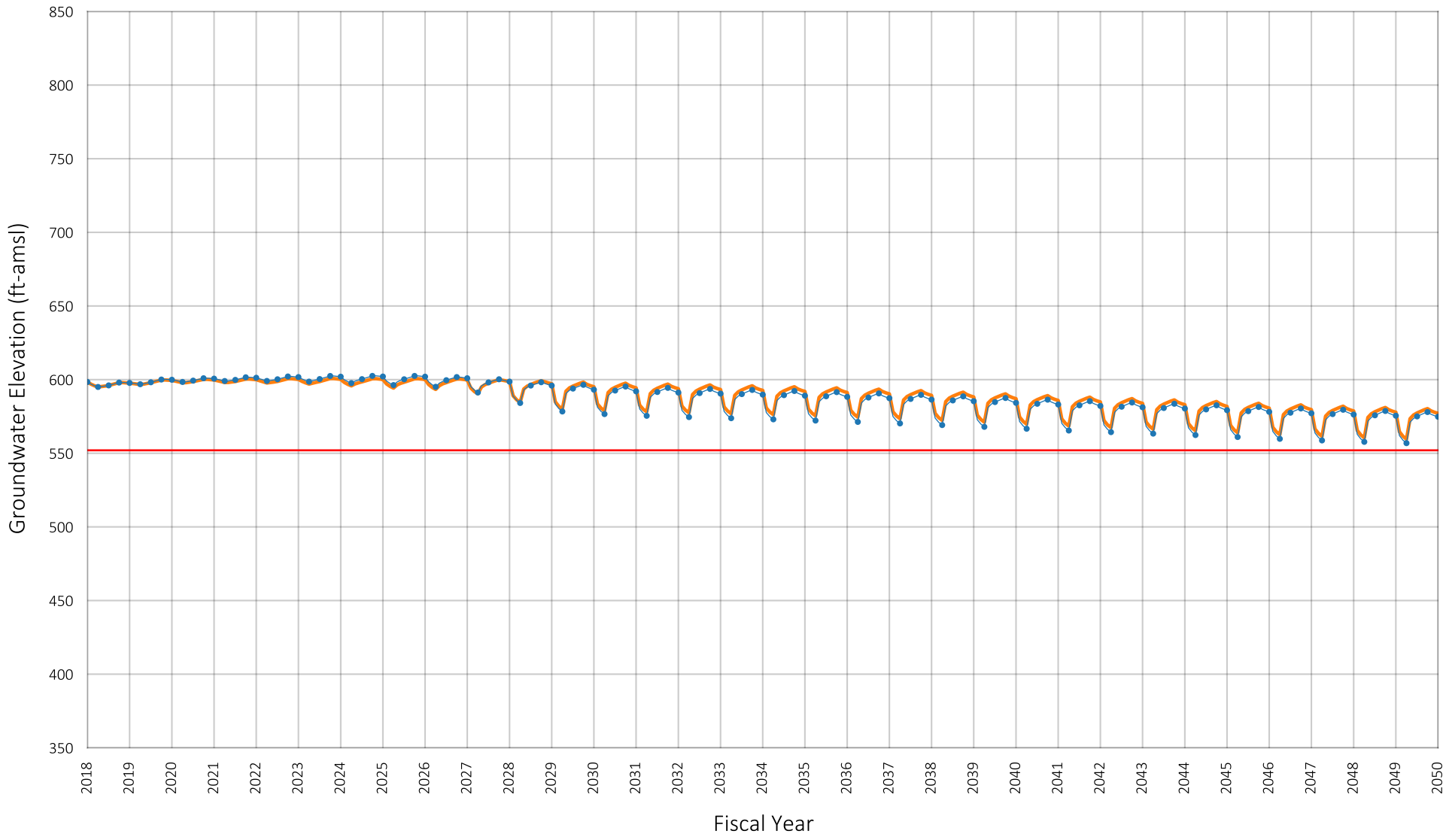
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003498
Owner: Jurupa Community Services District
Well Name: 15

Figure A-54



Location of Well in Chino Basin

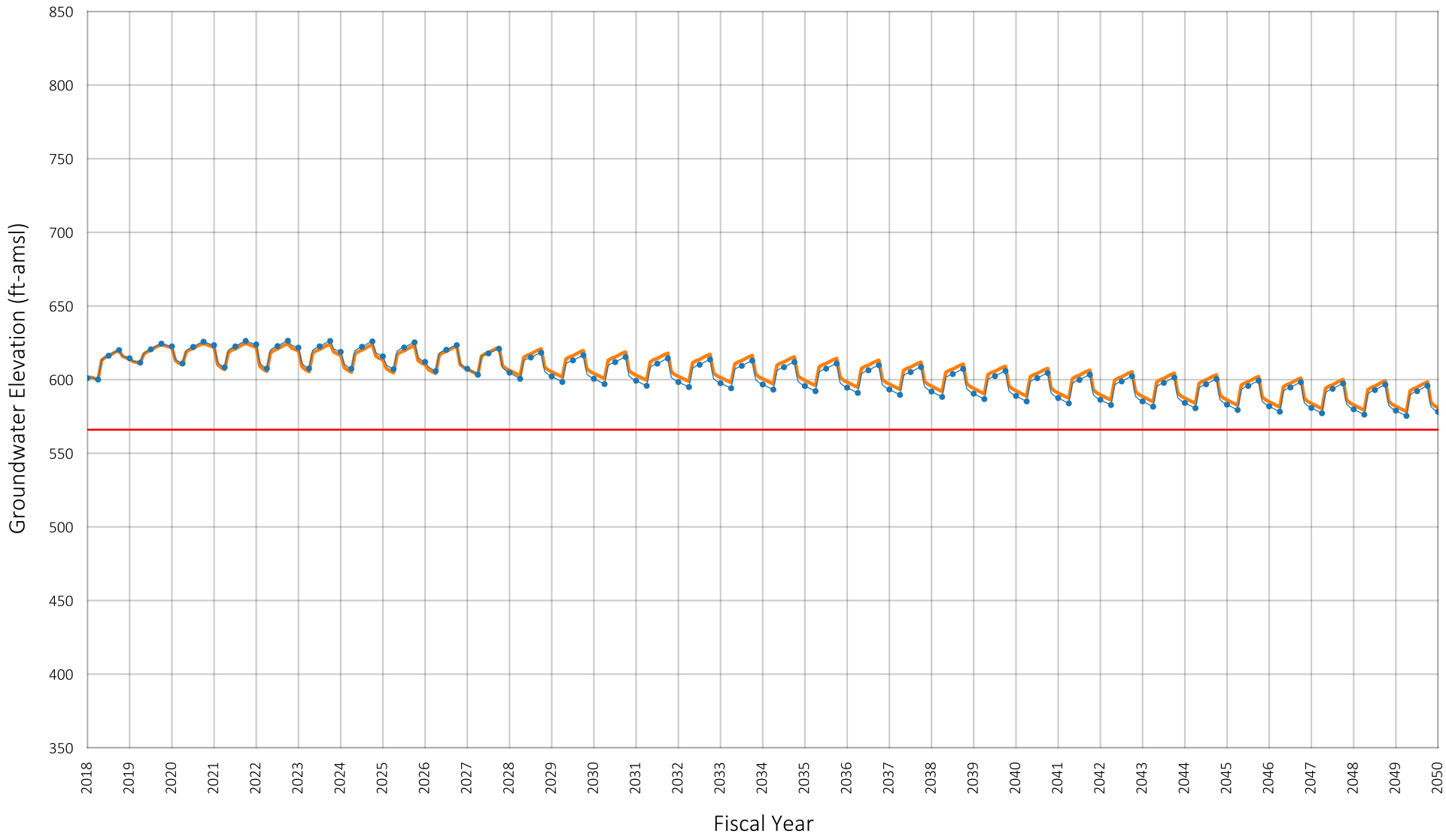
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003502
Owner: Jurupa Community Services District
Well Name: 16

Figure A-55



Location of Well in Chino Basin

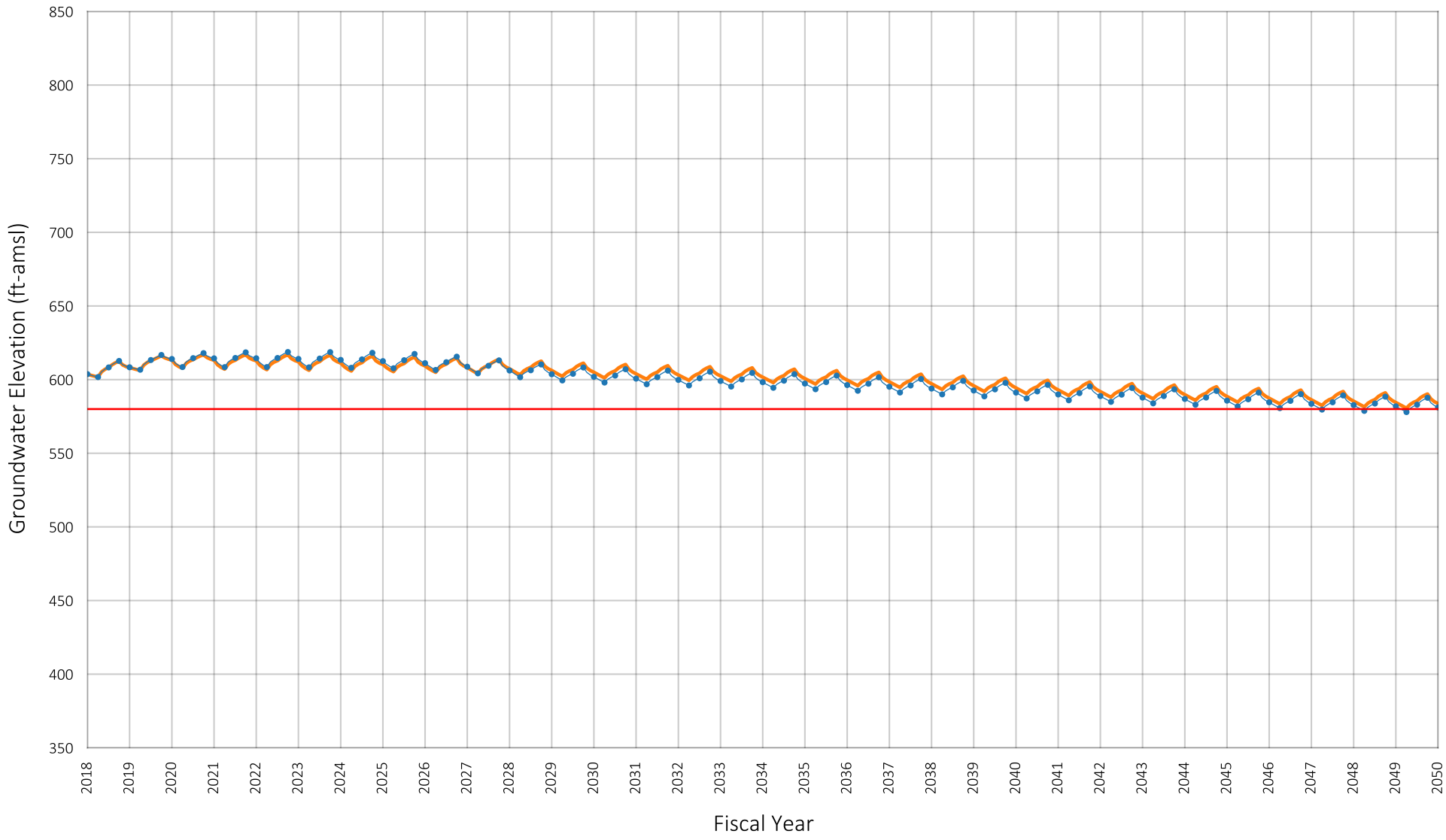
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003467
Owner: Jurupa Community Services District
Well Name: 17

Figure A-56



Location of Well in Chino Basin

SYR1

LSLS

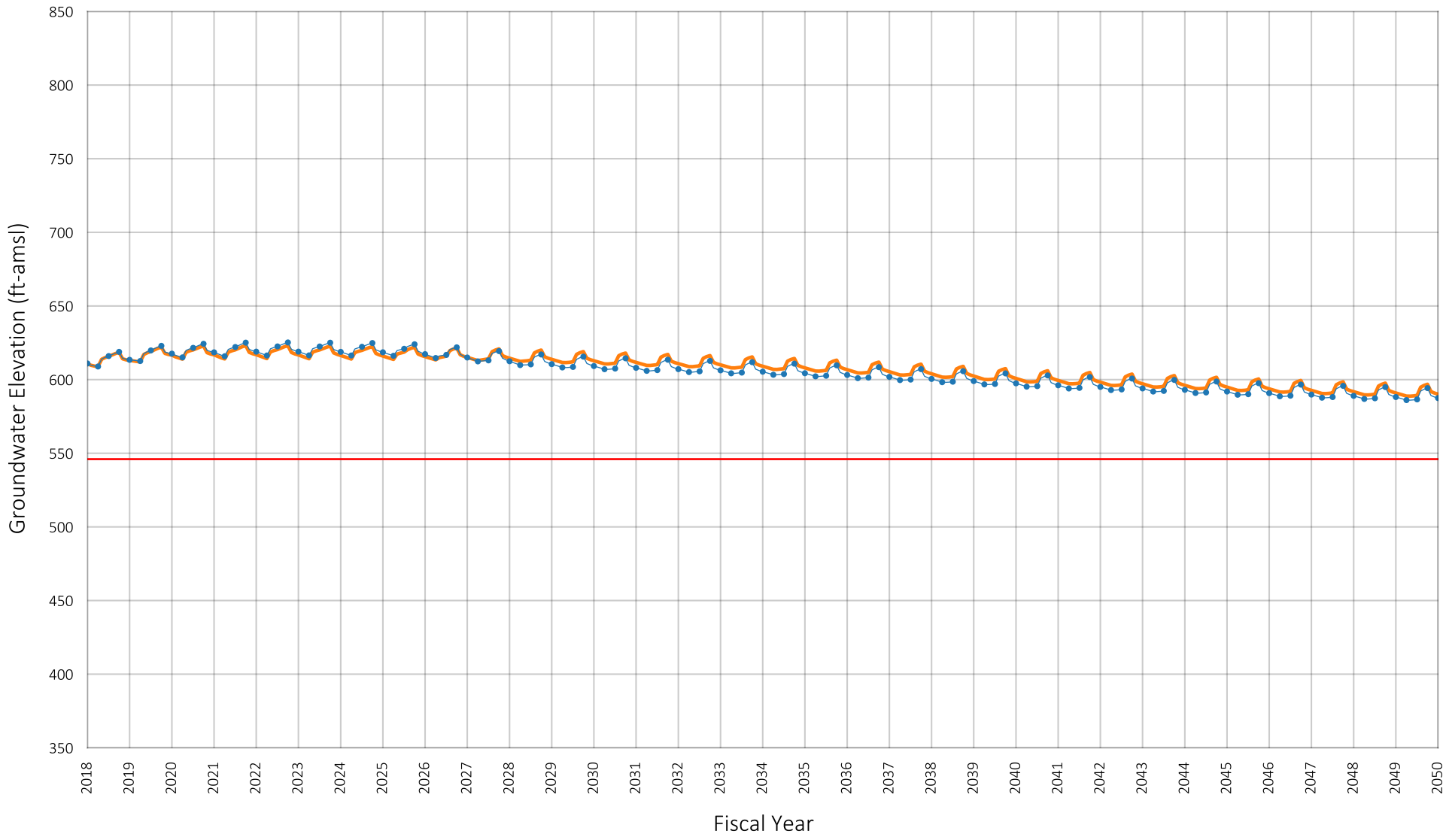
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003469
Owner: Jurupa Community Services District
Well Name: 18

Figure A-57



Location of Well in Chino Basin

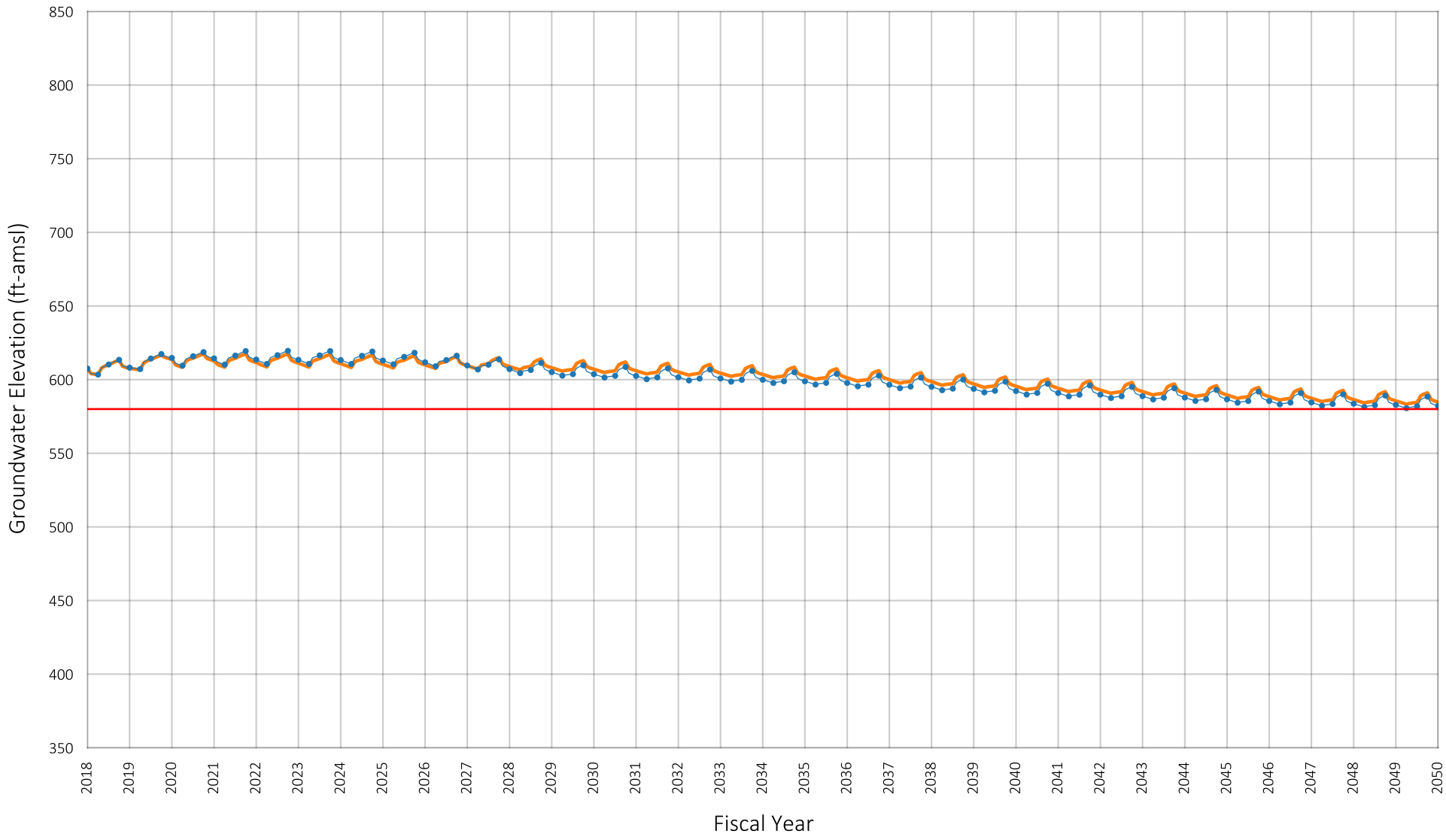
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003471
Owner: Jurupa Community Services District
Well Name: 19

Figure A-58



Location of Well in Chino Basin

SYR1

LSLS

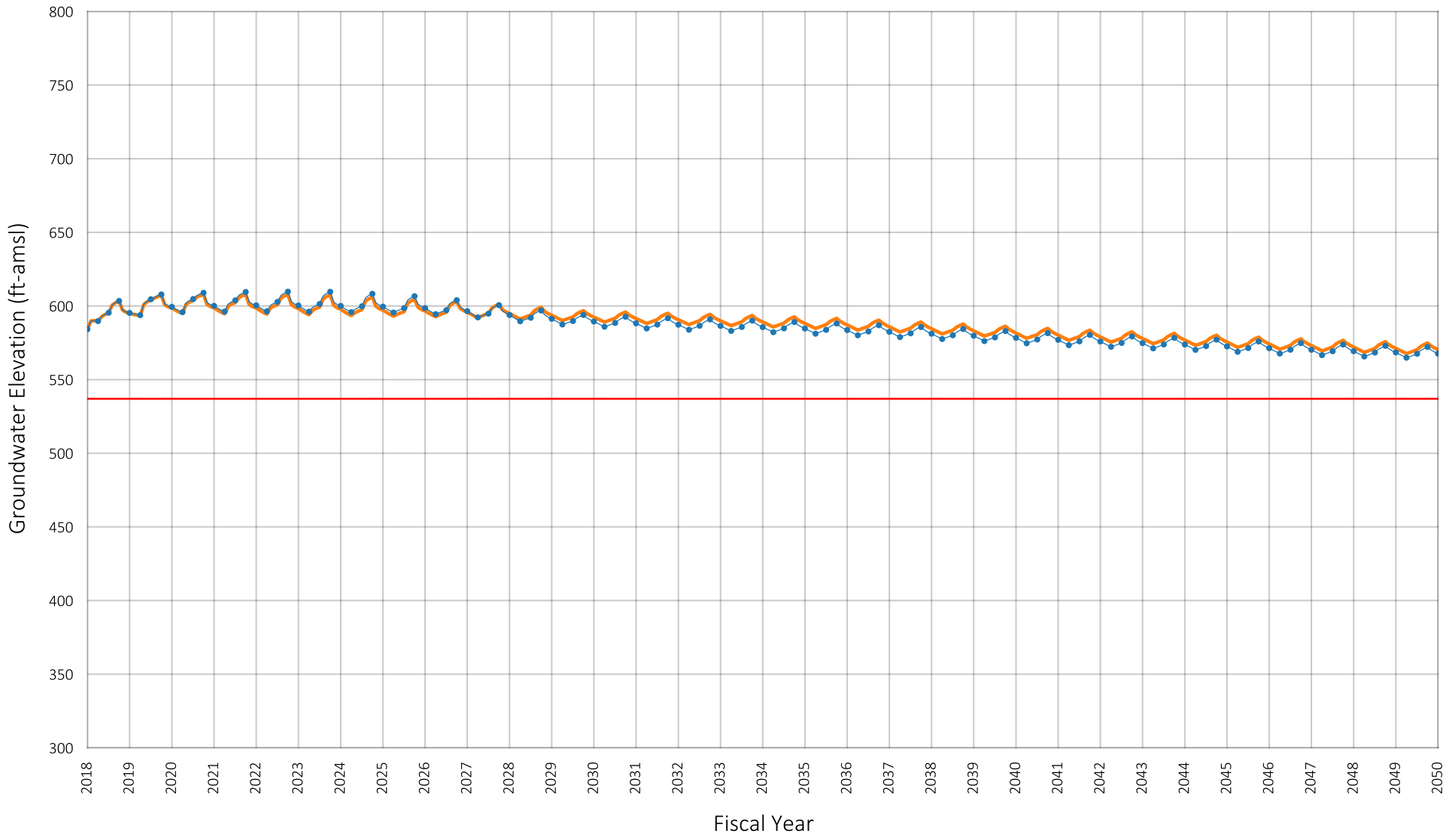
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003472
Owner: Jurupa Community Services District
Well Name: 20

Figure A-59



Location of Well in Chino Basin

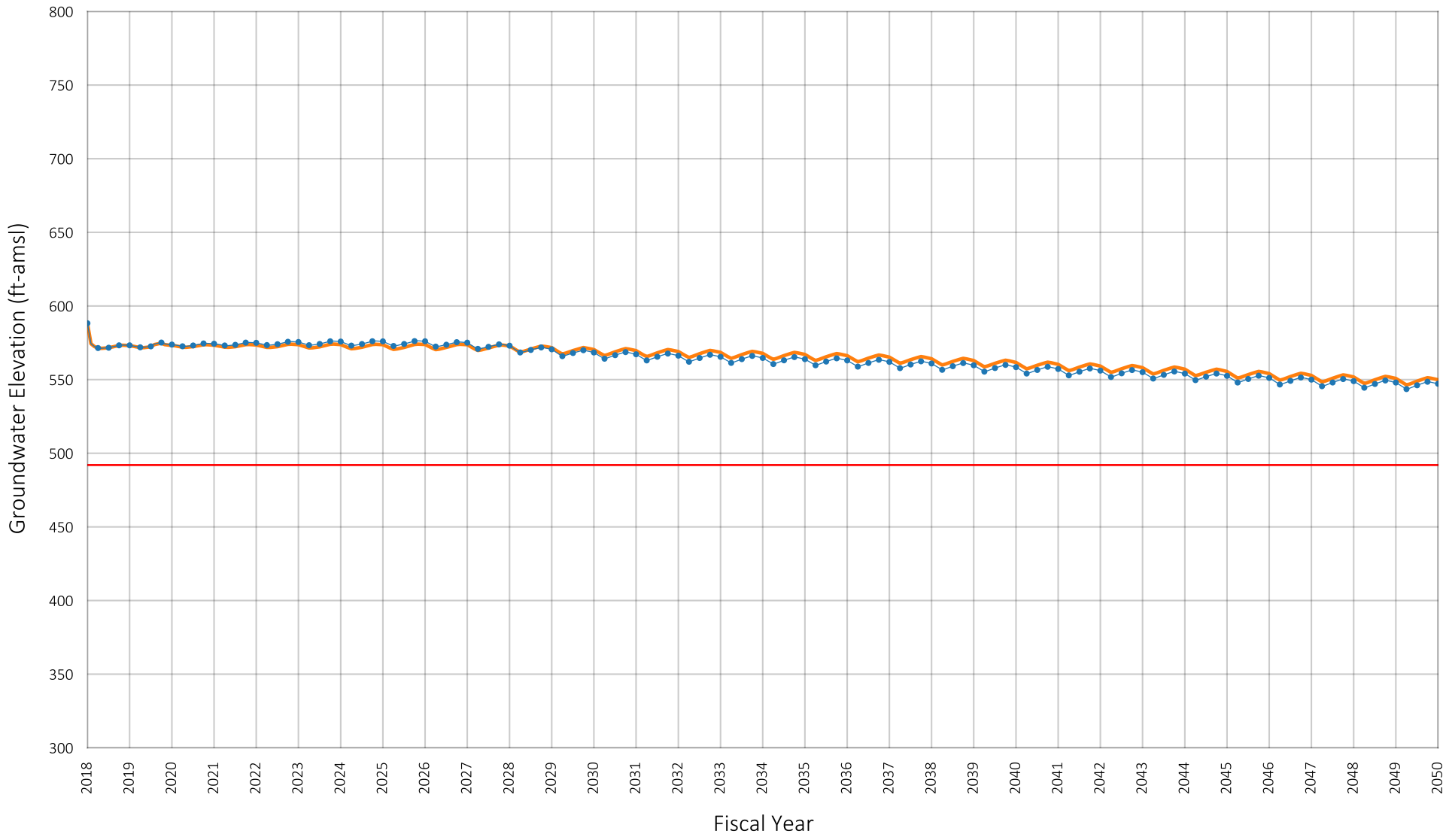
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1220154
Owner: Jurupa Community Services District
Well Name: 22

Figure A-60



Location of Well in Chino Basin

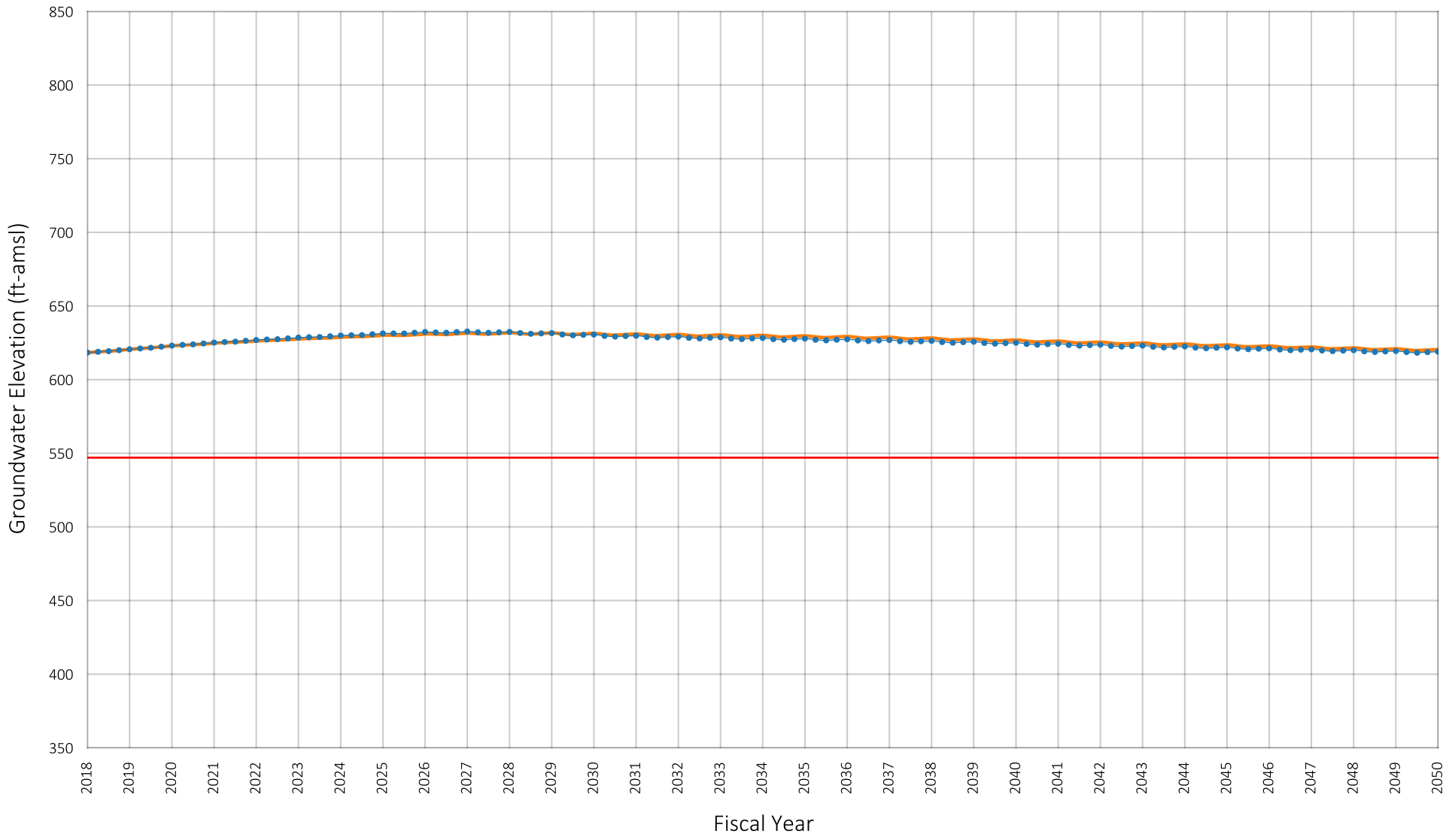
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1220155
Owner: Jurupa Community Services District
Well Name: 23

Figure A-61



Location of Well in Chino Basin

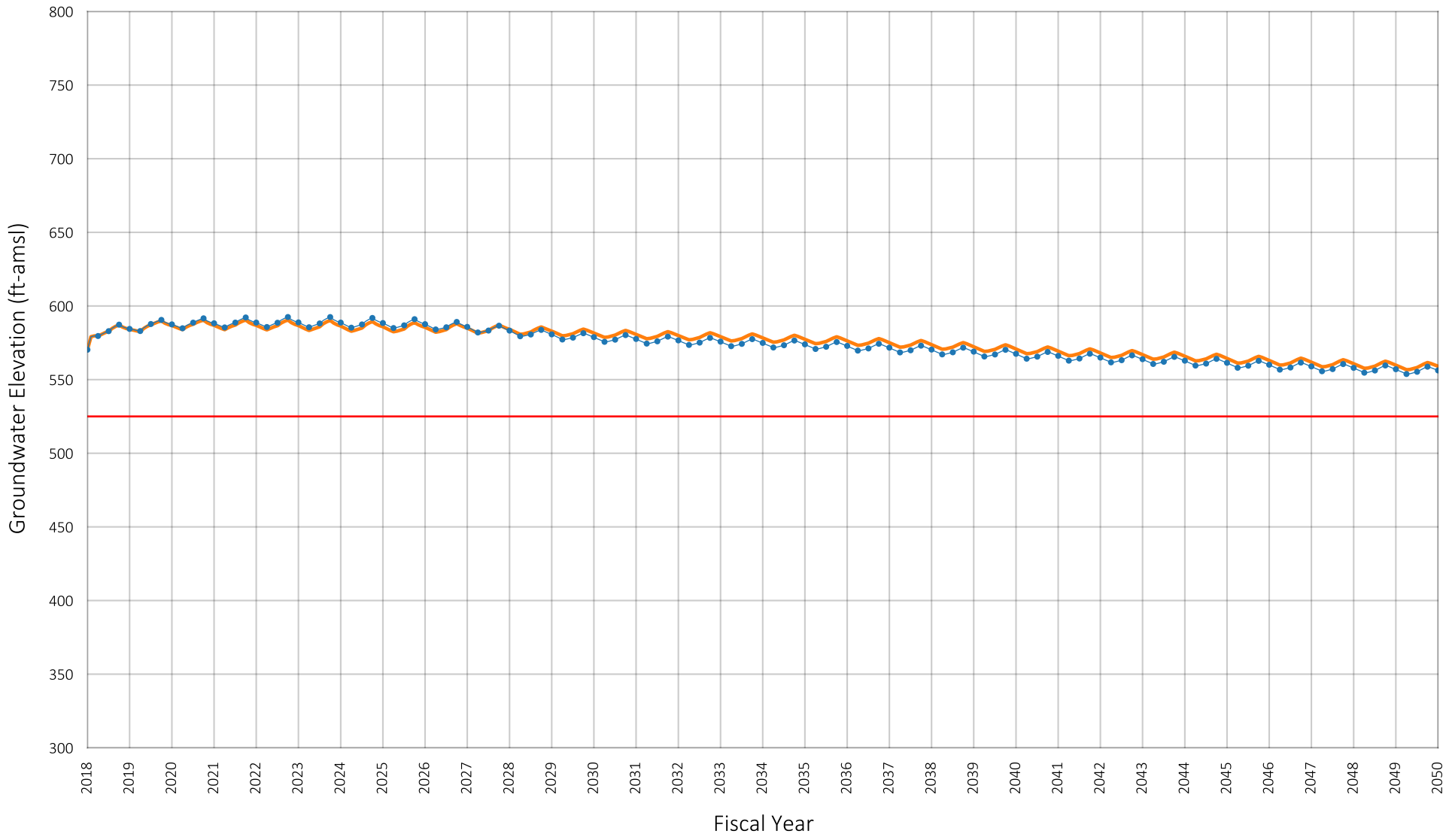
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1003515
Owner: Jurupa Community Services District
Well Name: 24

Figure A-62



Location of Well in Chino Basin

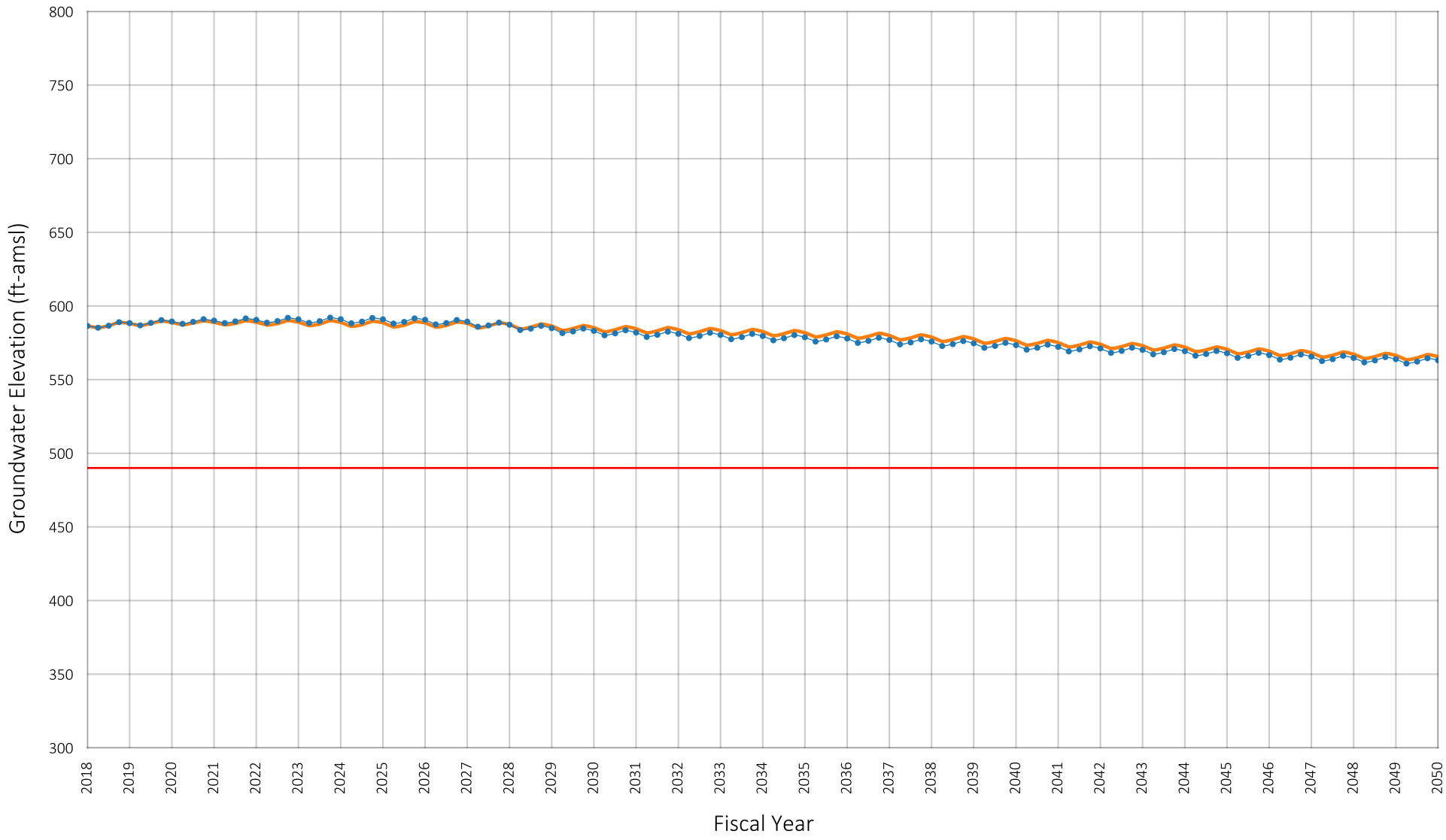
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1220158
Owner: Jurupa Community Services District
Well Name: 25

Figure A-63



Location of Well in Chino Basin

SYR1

LSLS

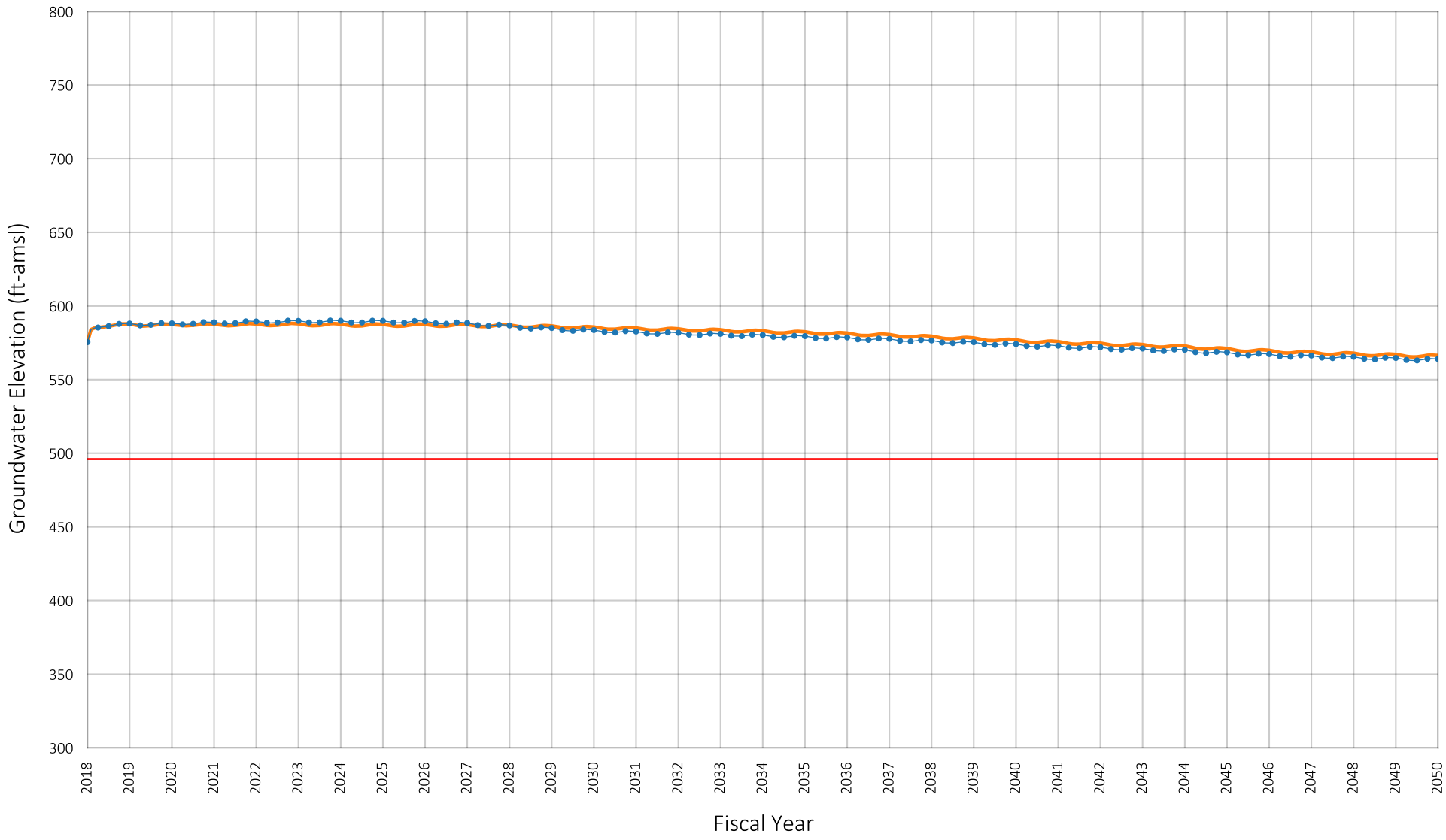
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1233787
Owner: Jurupa Community Services District
Well Name: 27

Figure A-64



Location of Well in Chino Basin

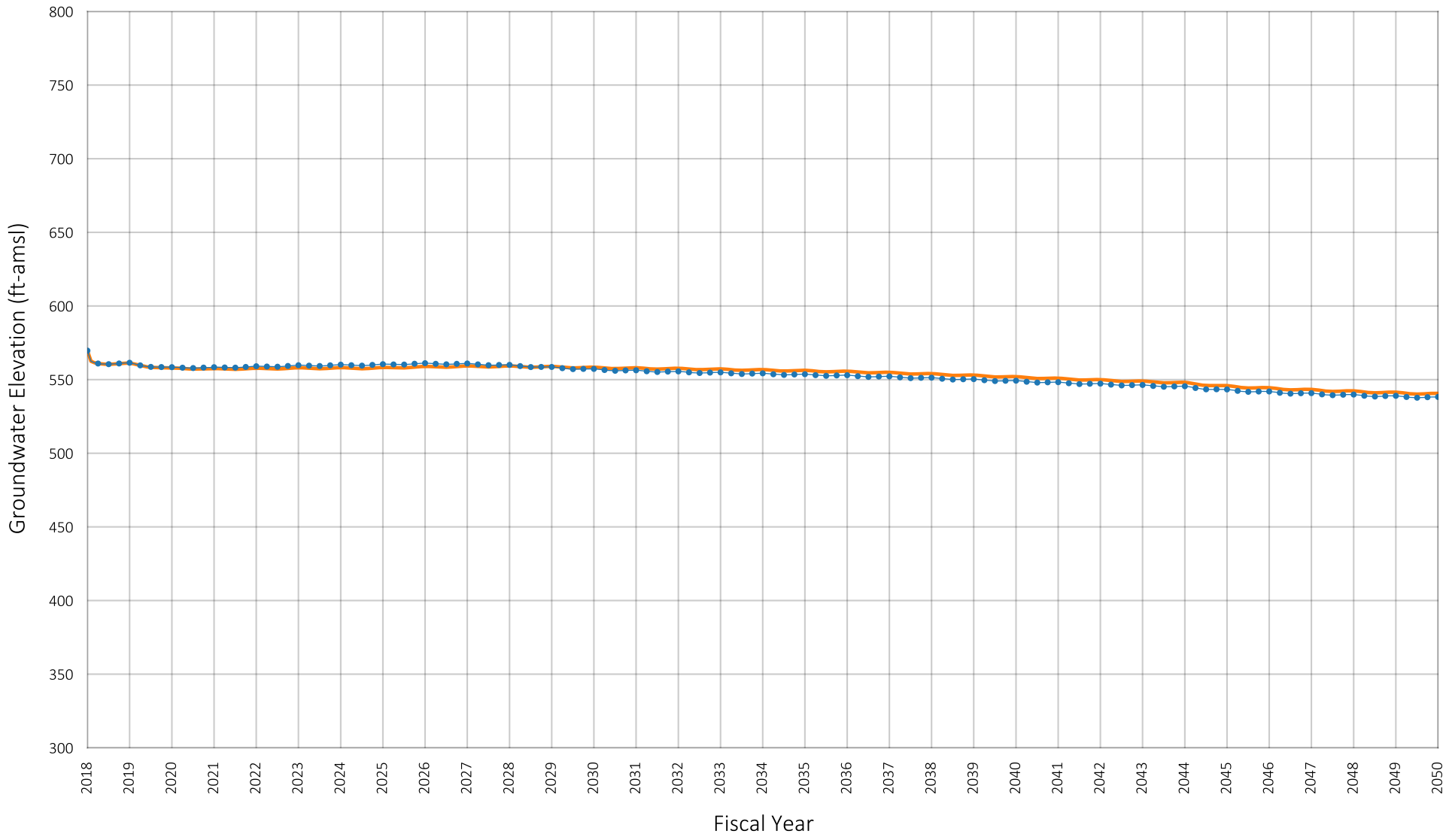
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1233788
Owner: Jurupa Community Services District
Well Name: 28

Figure A-65



Location of Well in Chino Basin

SYR1

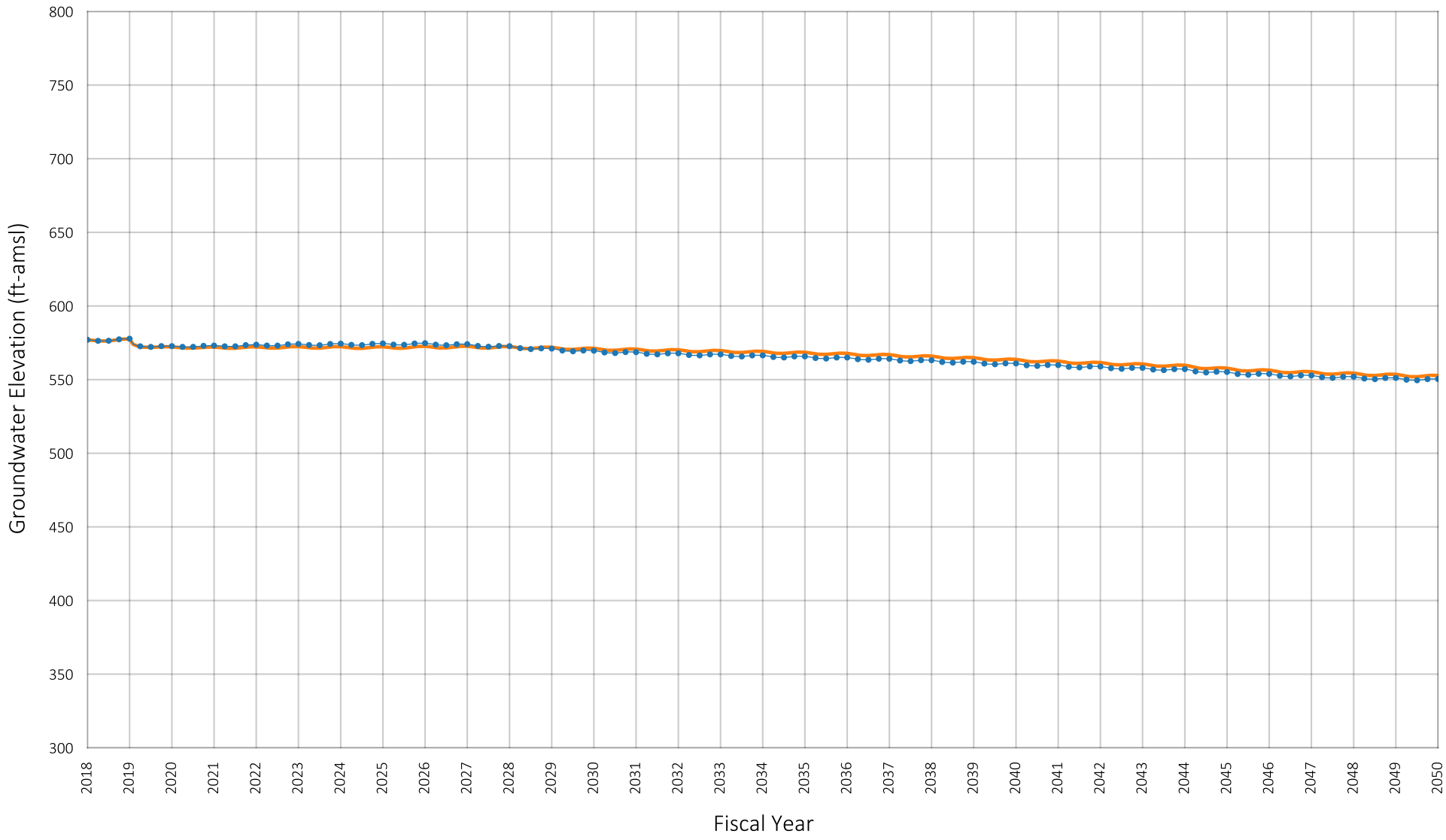
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207942
Owner: Jurupa Community Services District
Well Name: IDI-1

Figure A-66



Location of Well in Chino Basin

SYR1

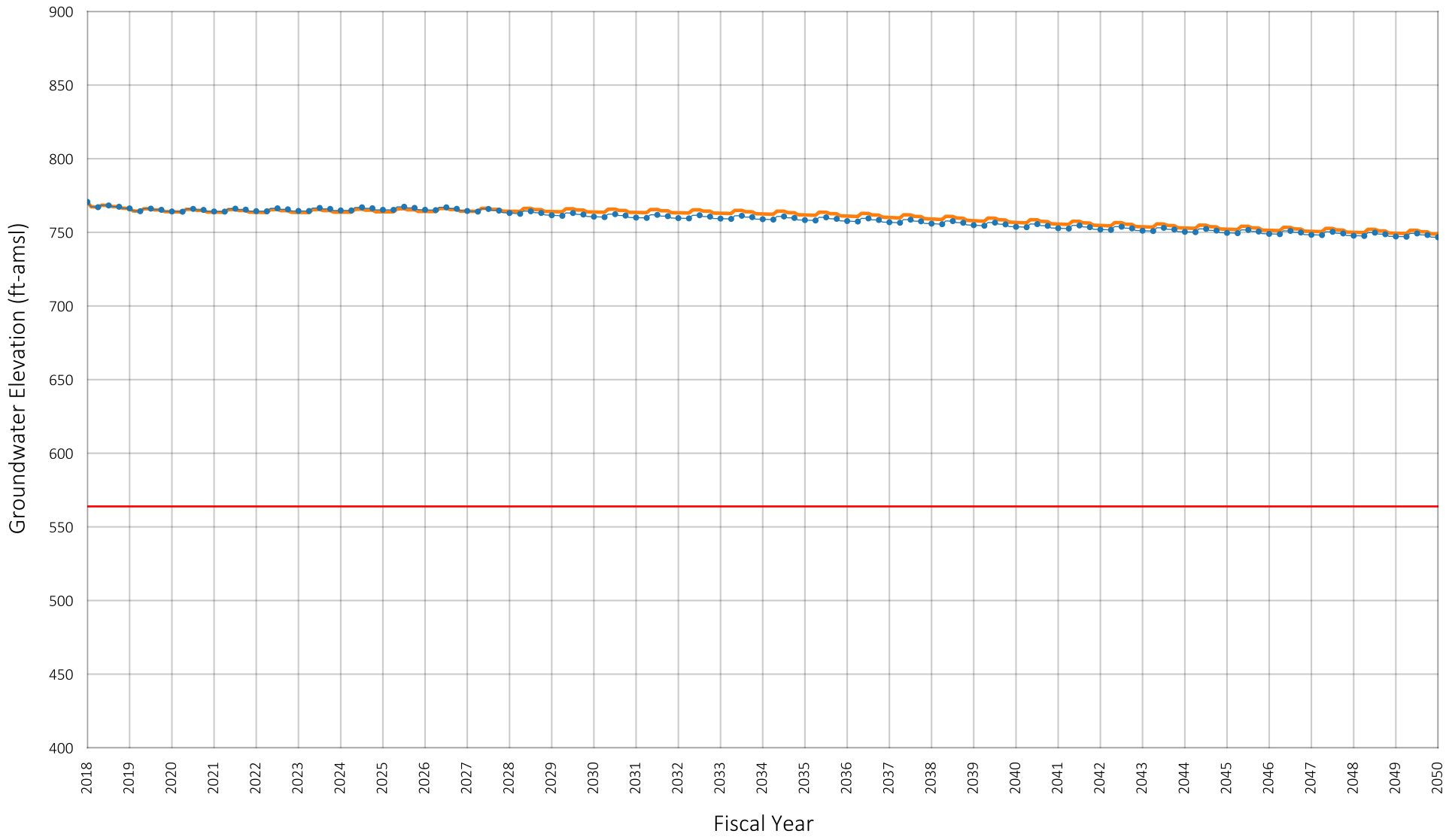
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 999902
Owner: Jurupa Community Services District
Well Name: IDI-2

Figure A-67



Location of Well in Chino Basin

SYR1

LSLS

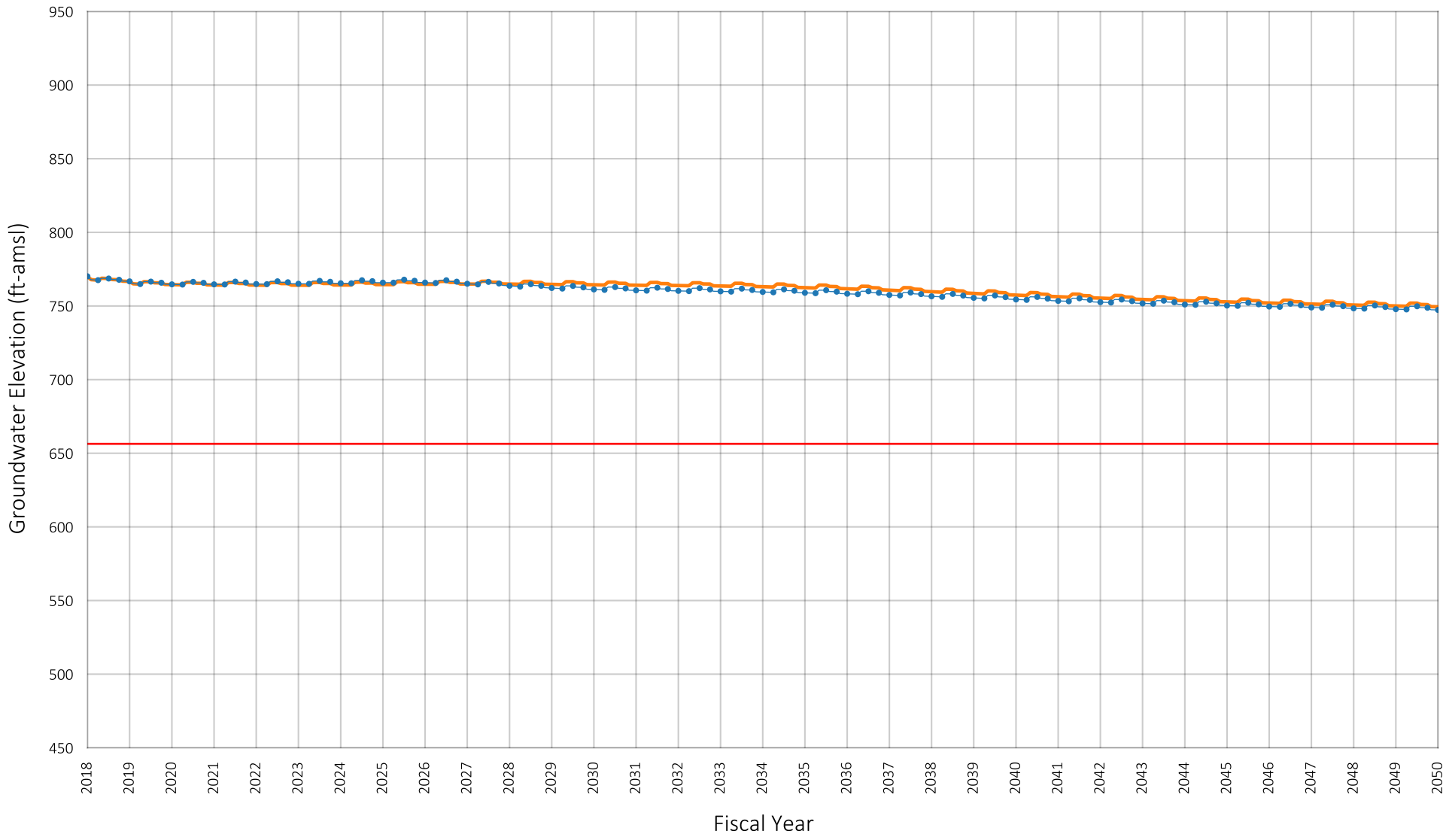
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1221751
Owner: Marygold Mutual Water Company
Well Name: MMWC 06

Figure A-68



Location of Well in Chino Basin

SYR1

LSLS

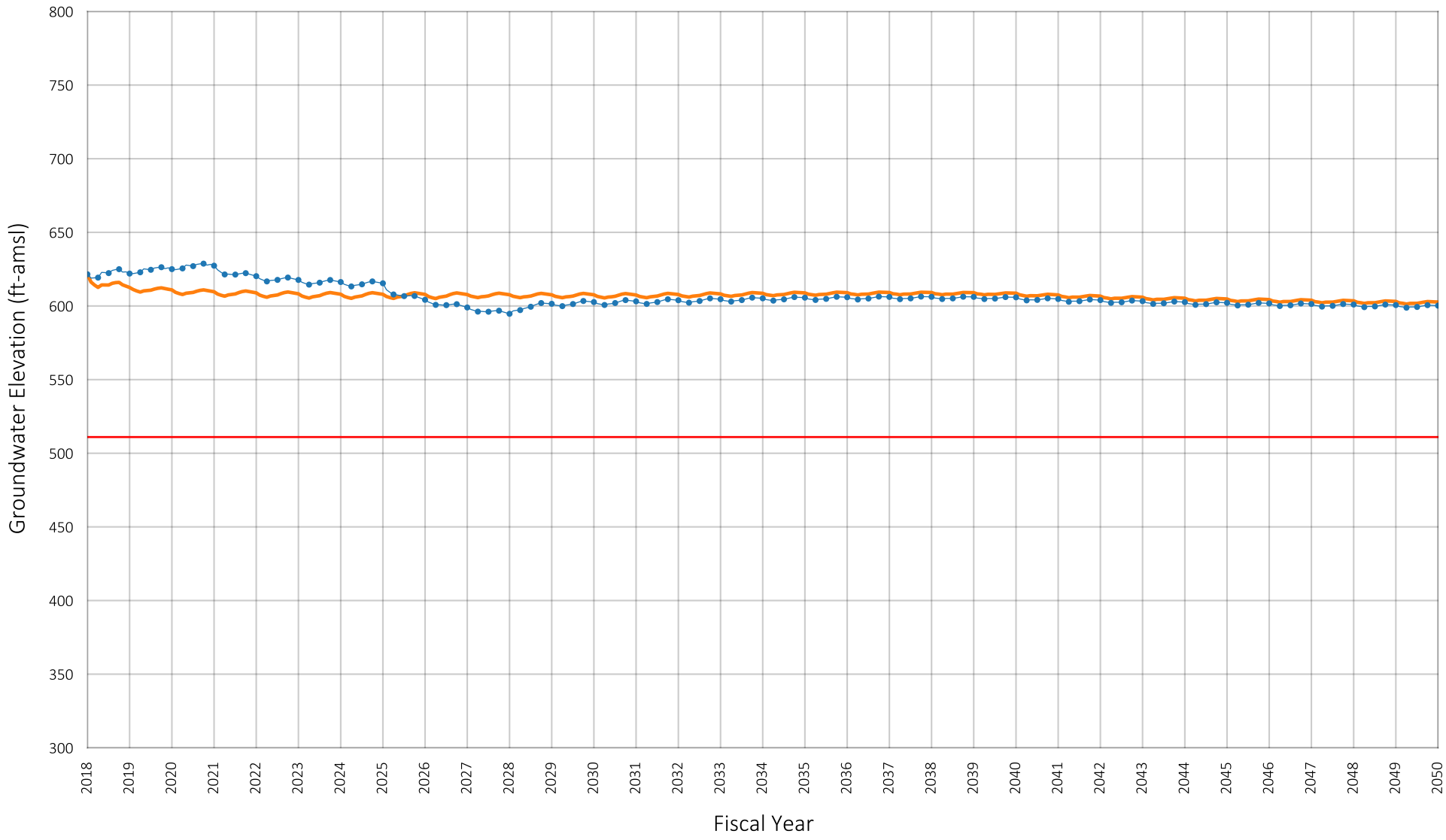
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1221752
Owner: Marygold Mutual Water Company
Well Name: MMWC 07

Figure A-69



Location of Well in Chino Basin

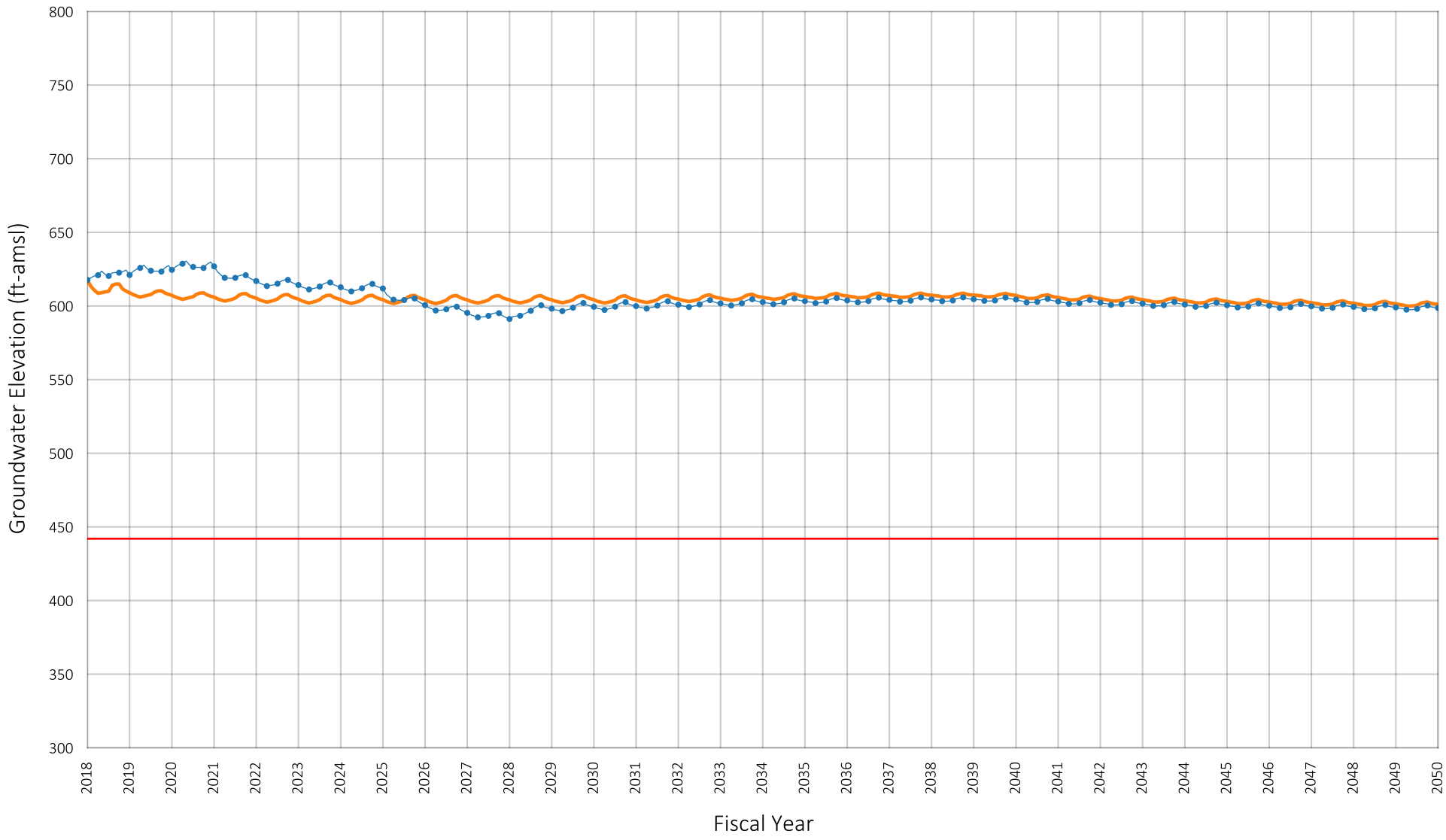
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002541
Owner: Monte Vista Water District
Well Name: 4

Figure A-70



Location of Well in Chino Basin

SYR1

LSLS

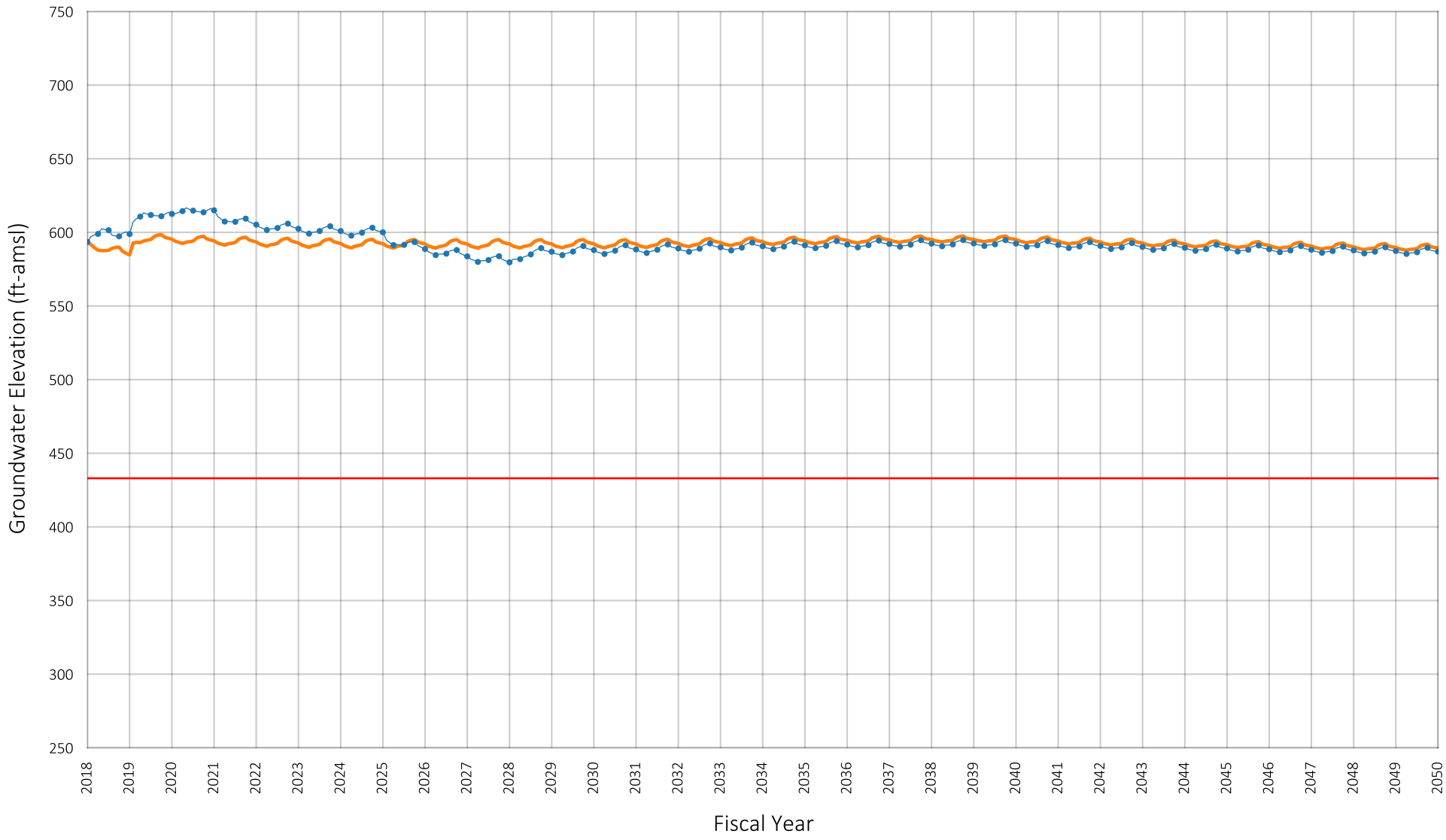
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002544
Owner: Monte Vista Water District
Well Name: 5

Figure A-71



Location of Well in Chino Basin

SYR1

LSLS

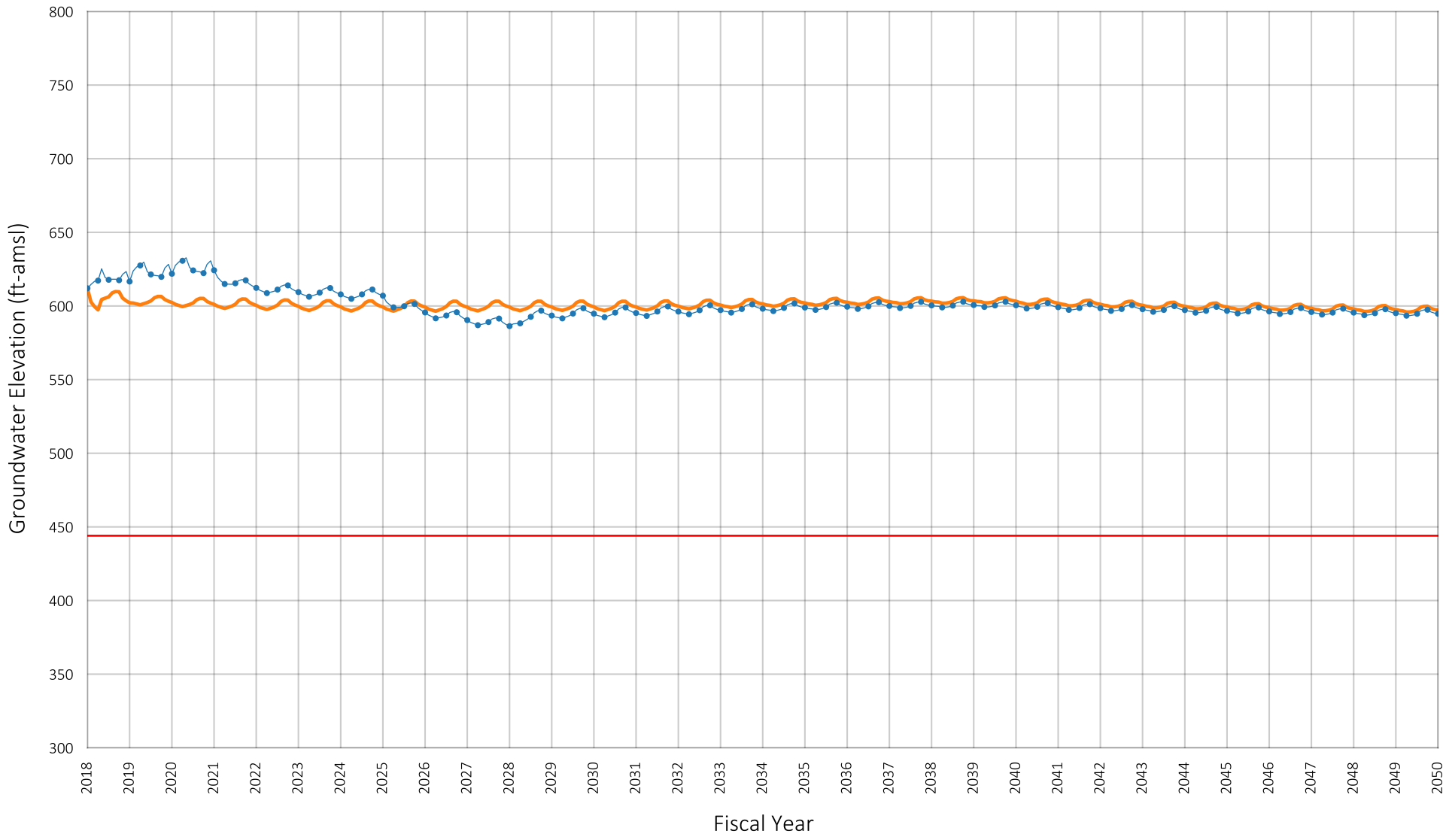
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002563
Owner: Monte Vista Water District
Well Name: 19

Figure A-72



Location of Well in Chino Basin

SYR1

LSLS

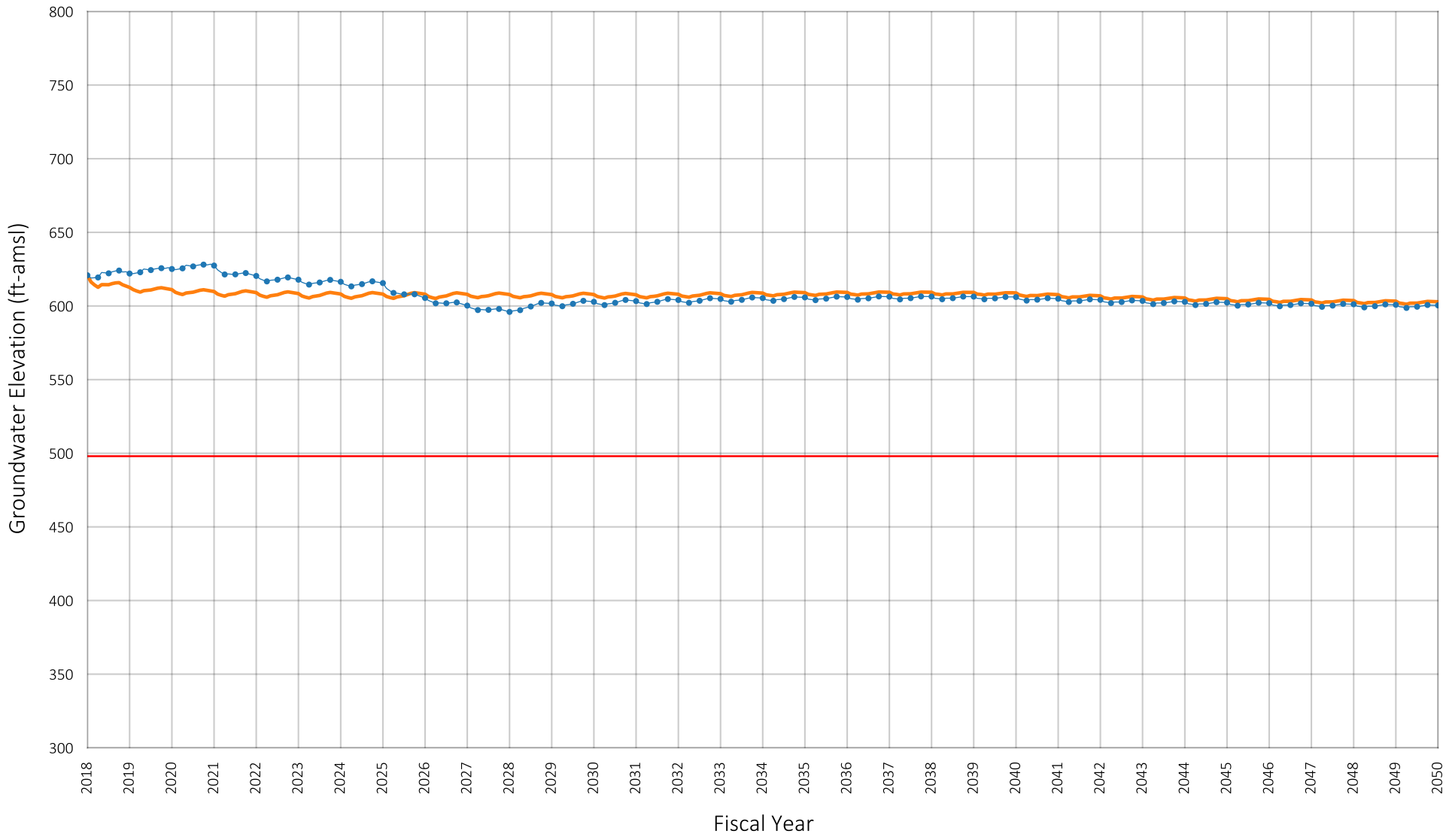
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206744
Owner: Monte Vista Water District
Well Name: 26

Figure A-73



Location of Well in Chino Basin

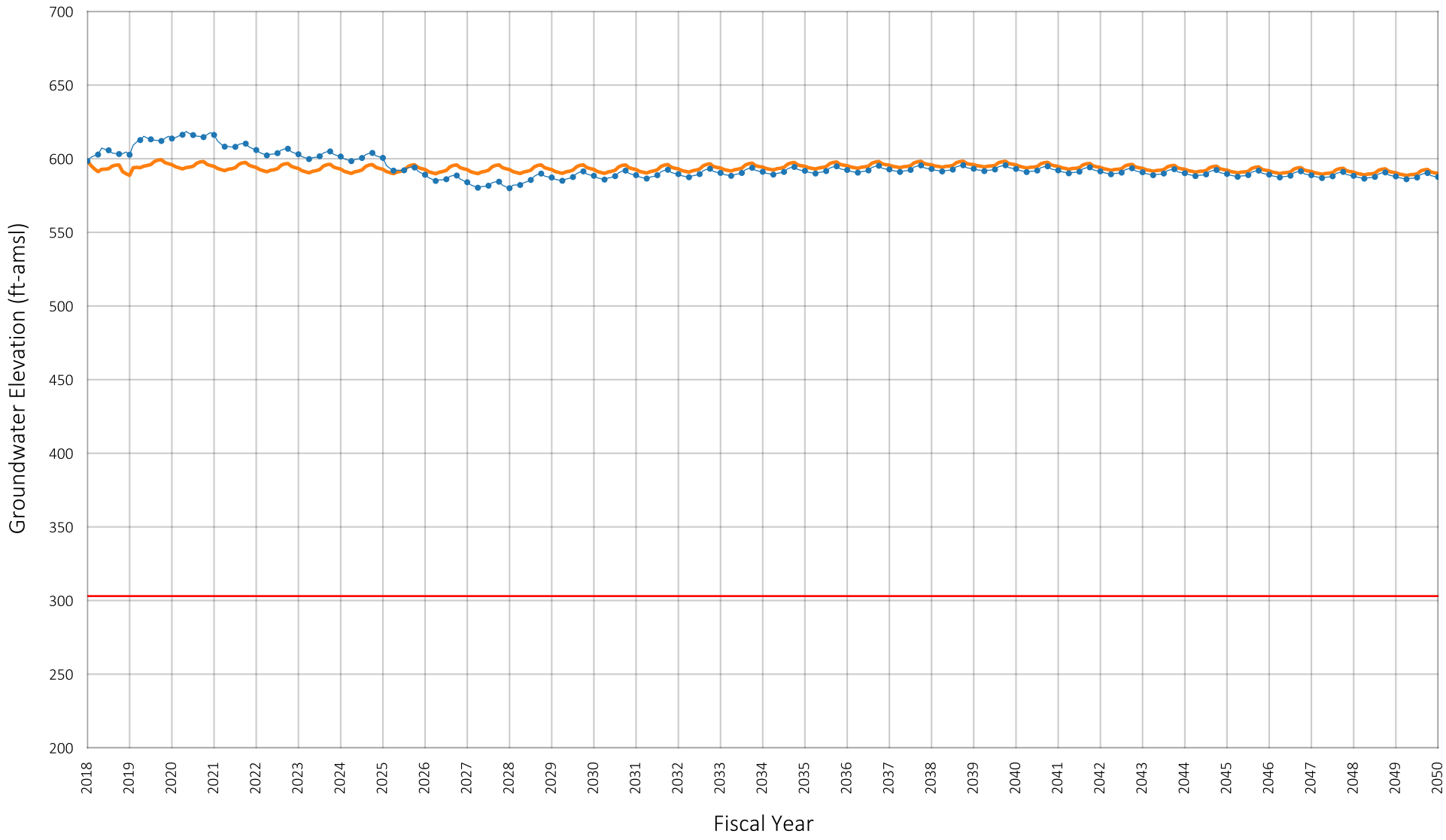
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206745
Owner: Monte Vista Water District
Well Name: 27

Figure A-74



Location of Well in Chino Basin

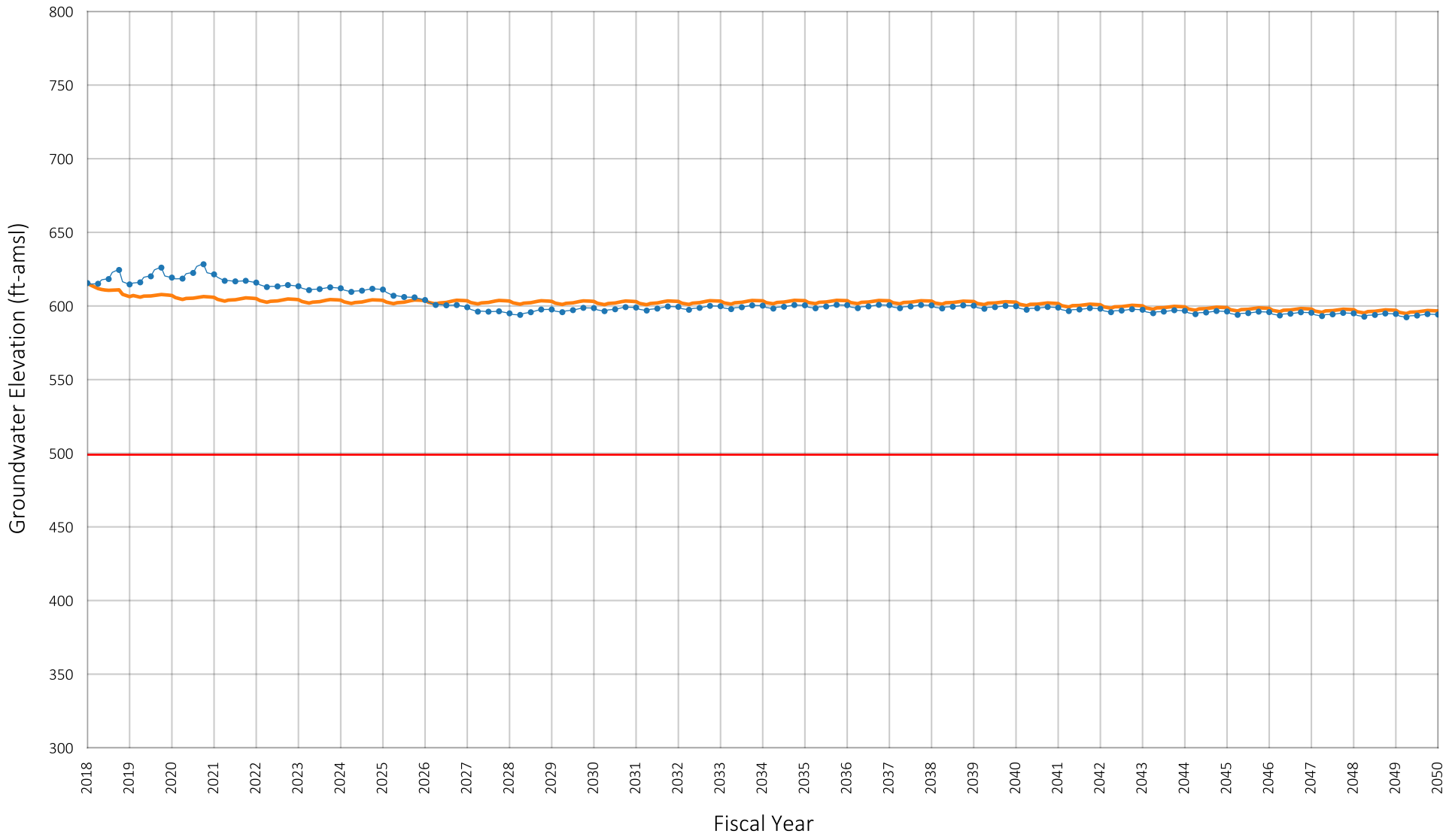
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206746
Owner: Monte Vista Water District
Well Name: 28

Figure A-75



Location of Well in Chino Basin

SYR1

LSLS

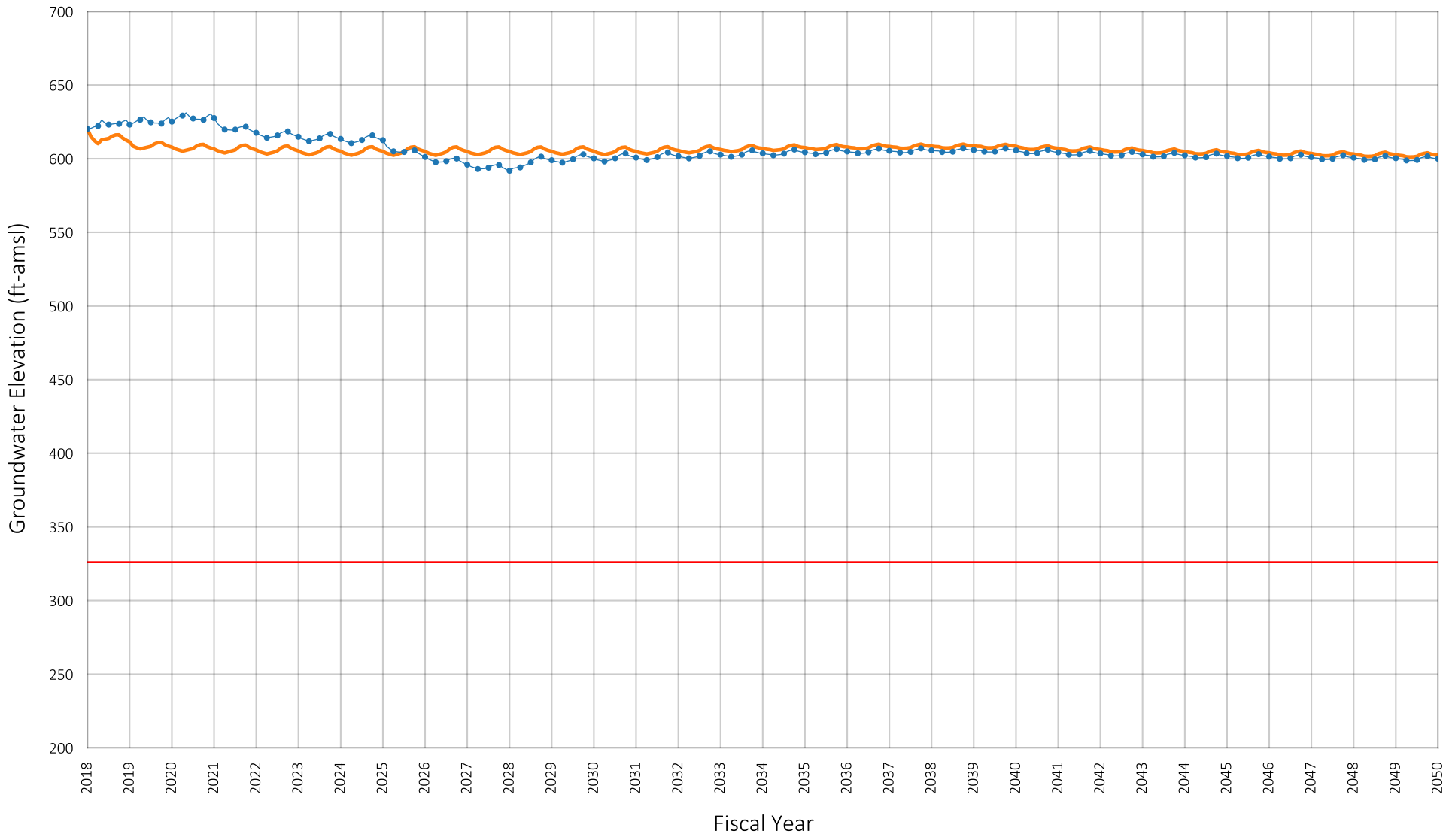
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1208781
Owner: Monte Vista Water District
Well Name: 30

Figure A-76



Location of Well in Chino Basin

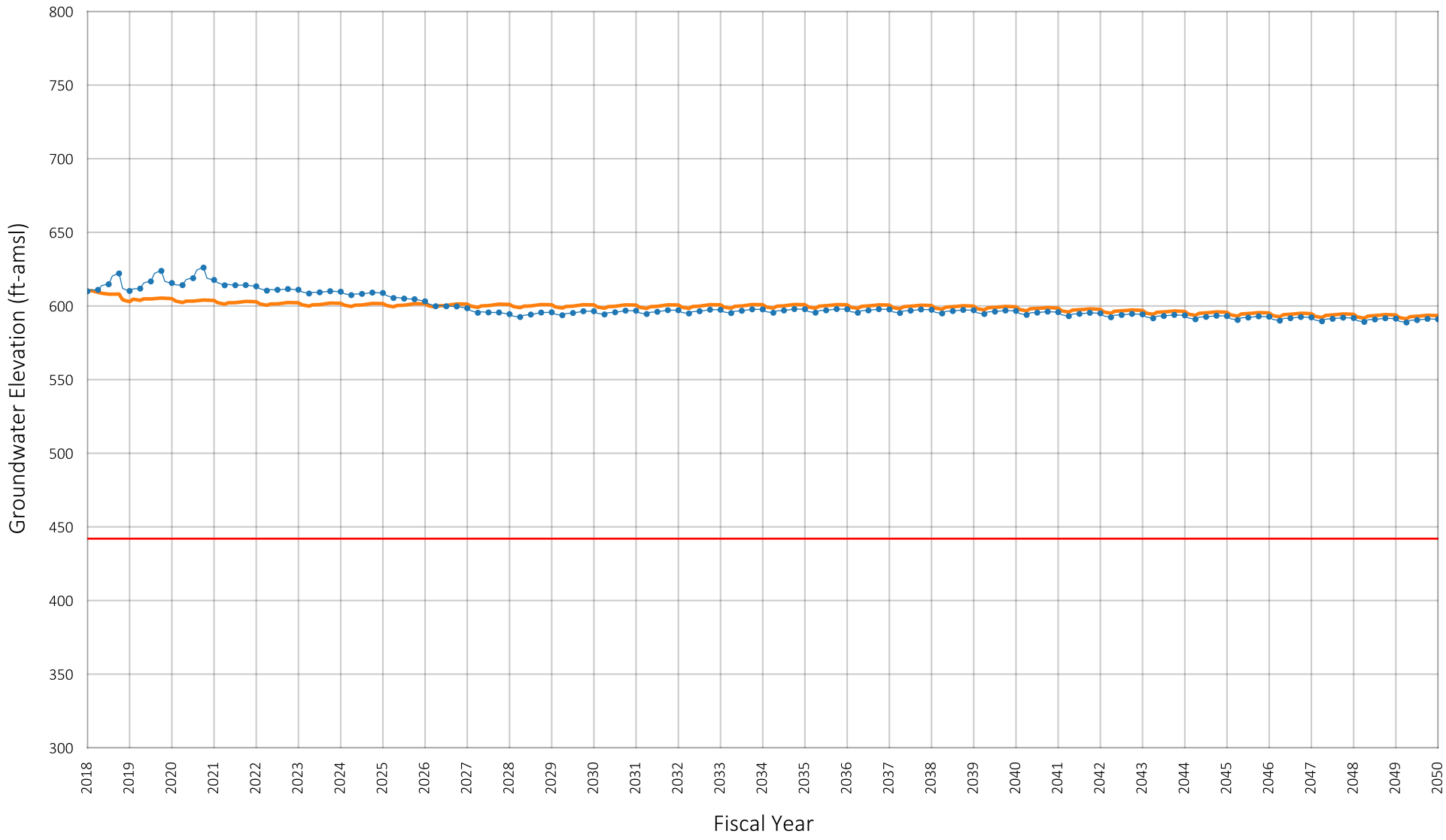
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1208782
Owner: Monte Vista Water District
Well Name: 31

Figure A-77



Location of Well in Chino Basin

SYR1

LSLS

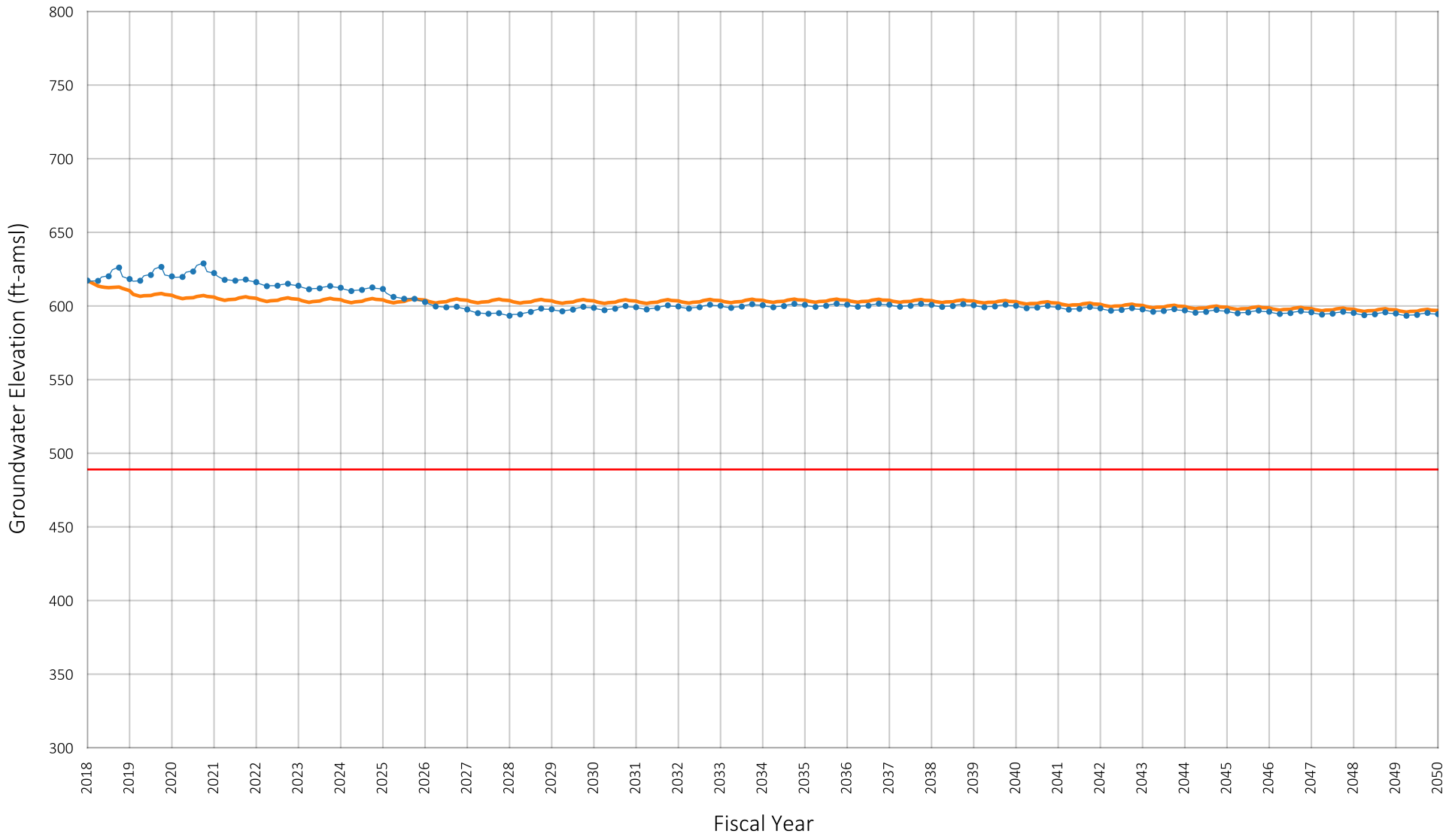
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1208771
Owner: Monte Vista Water District
Well Name: 32

Figure A-78



Location of Well in Chino Basin

SYR1

LSLS

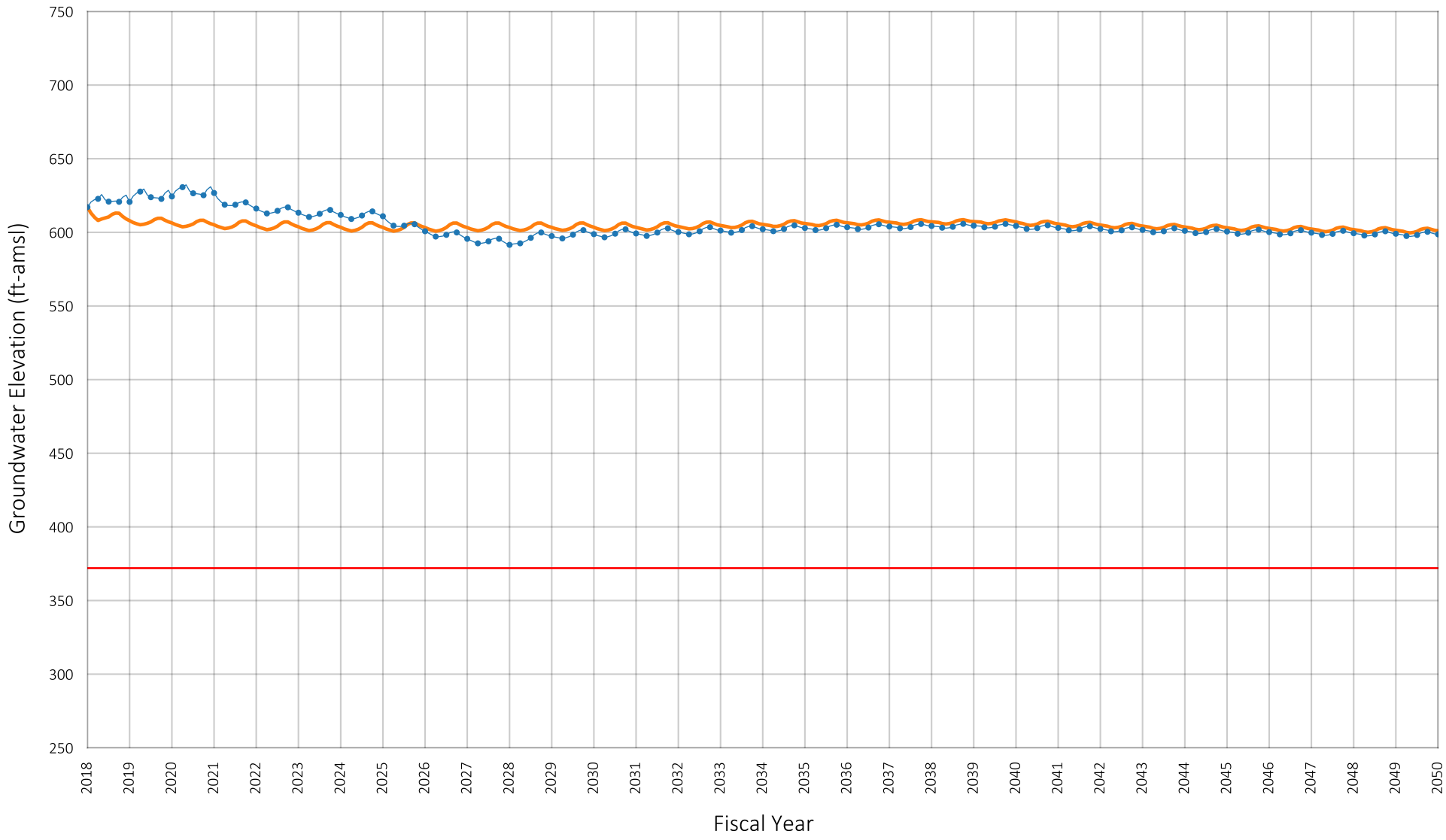
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1220173
Owner: Monte Vista Water District
Well Name: 33

Figure A-79



Location of Well in Chino Basin

SYR1

LSLS

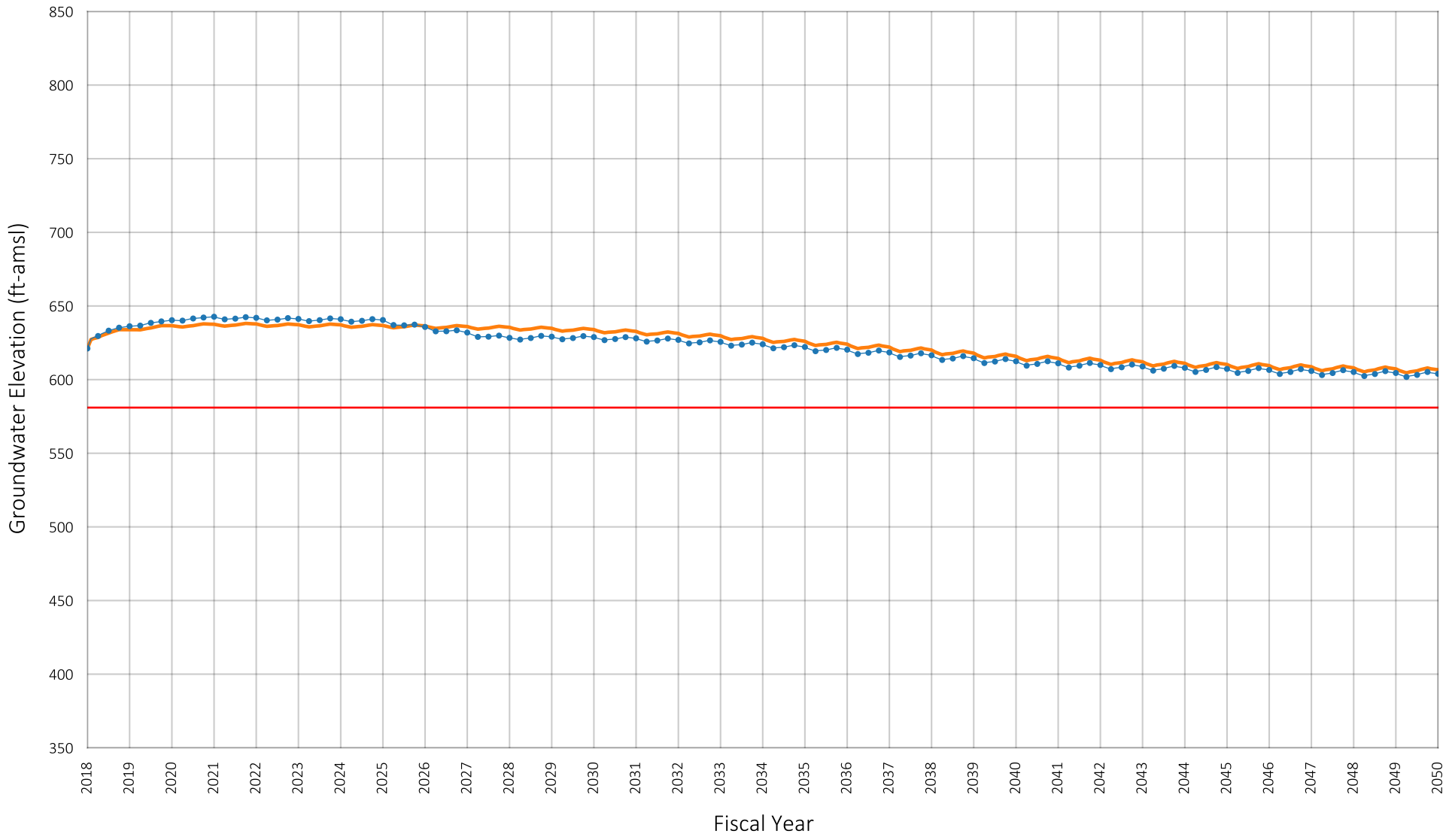
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1224765
Owner: Monte Vista Water District
Well Name: 34

Figure A-80



Location of Well in Chino Basin

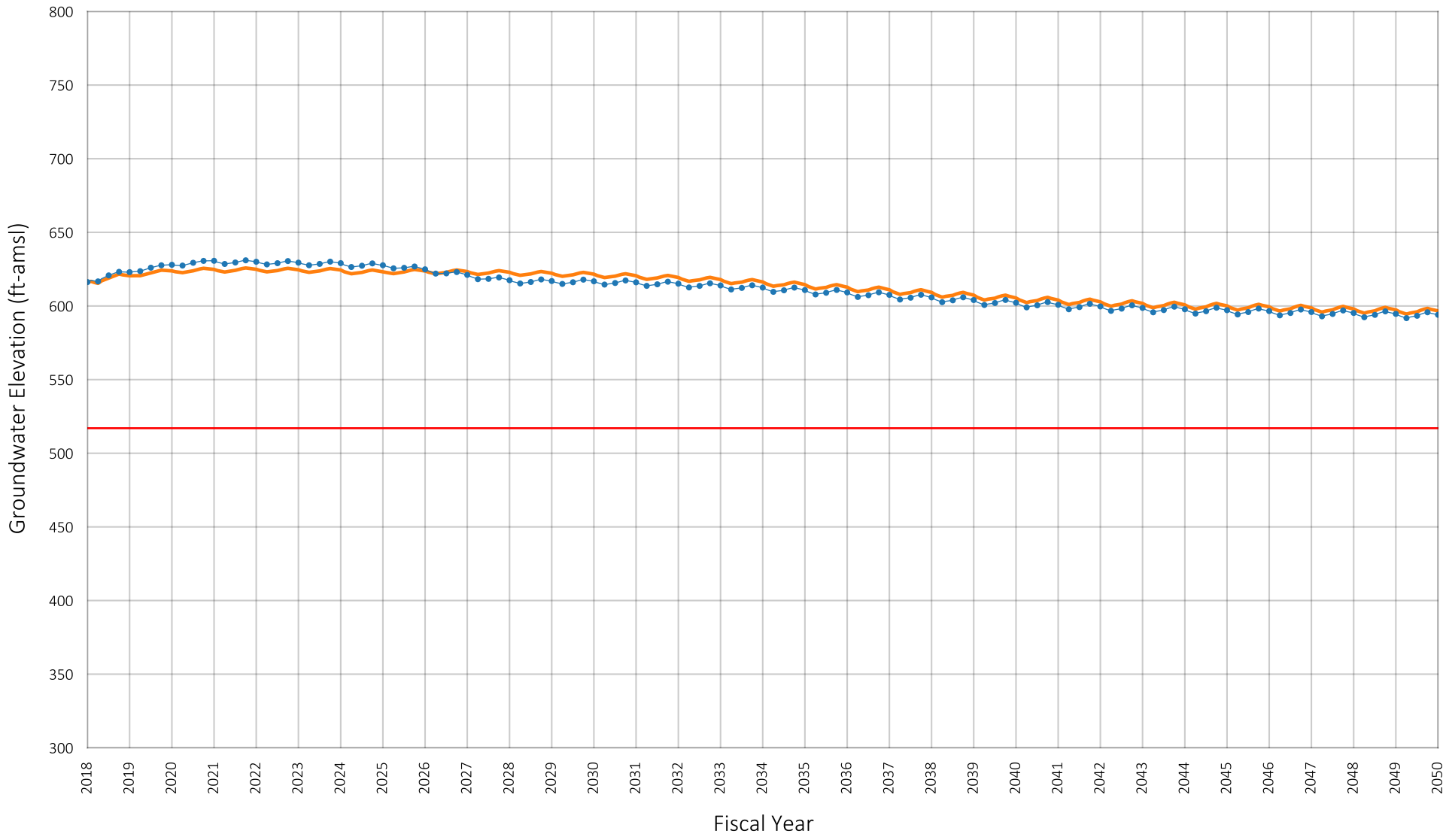
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002339
Owner: City of Ontario
Well Name: 24

Figure A-81



Location of Well in Chino Basin

SYR1

LSLS

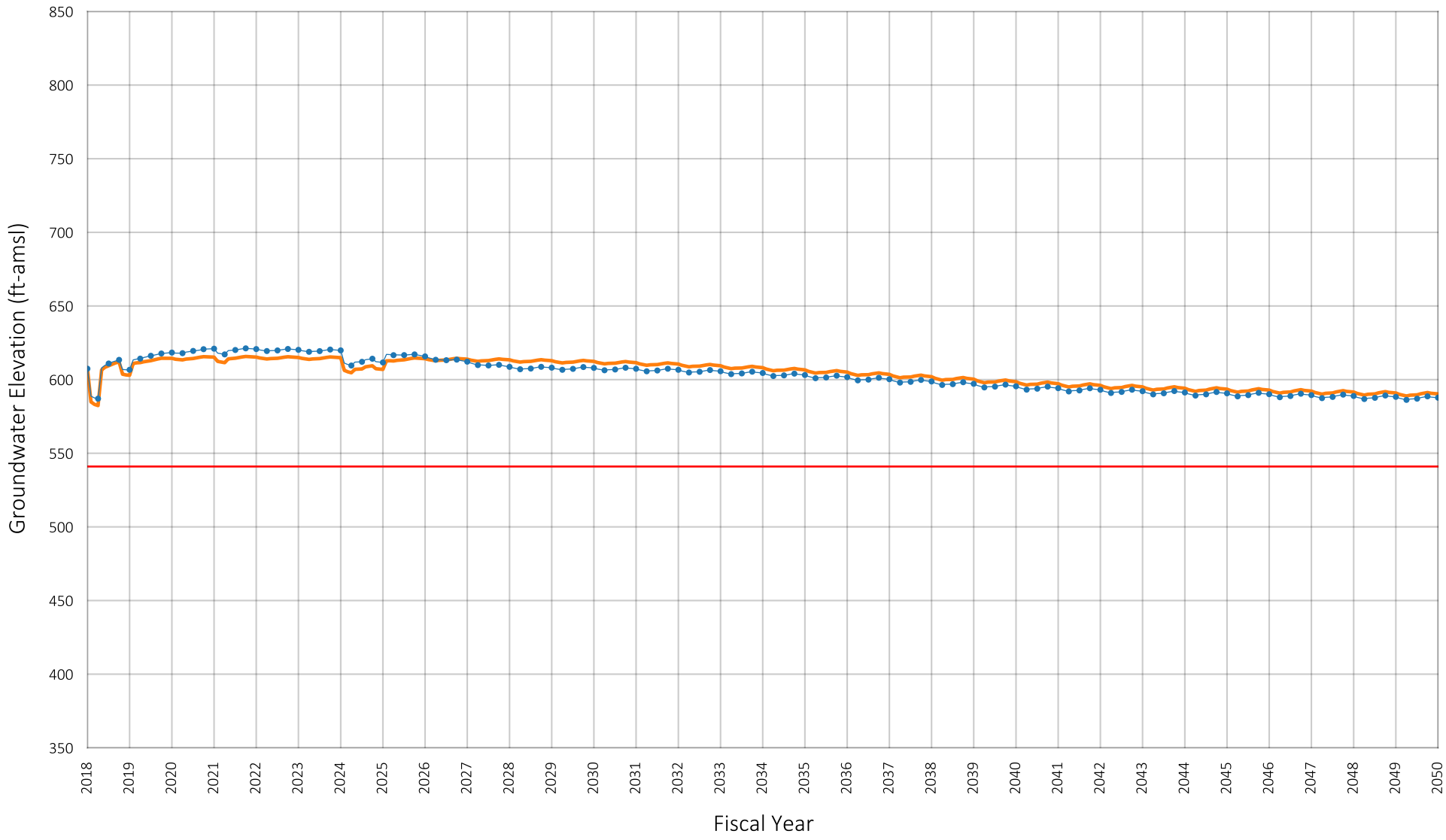
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002337
Owner: City of Ontario
Well Name: 25

Figure A-82



Location of Well in Chino Basin

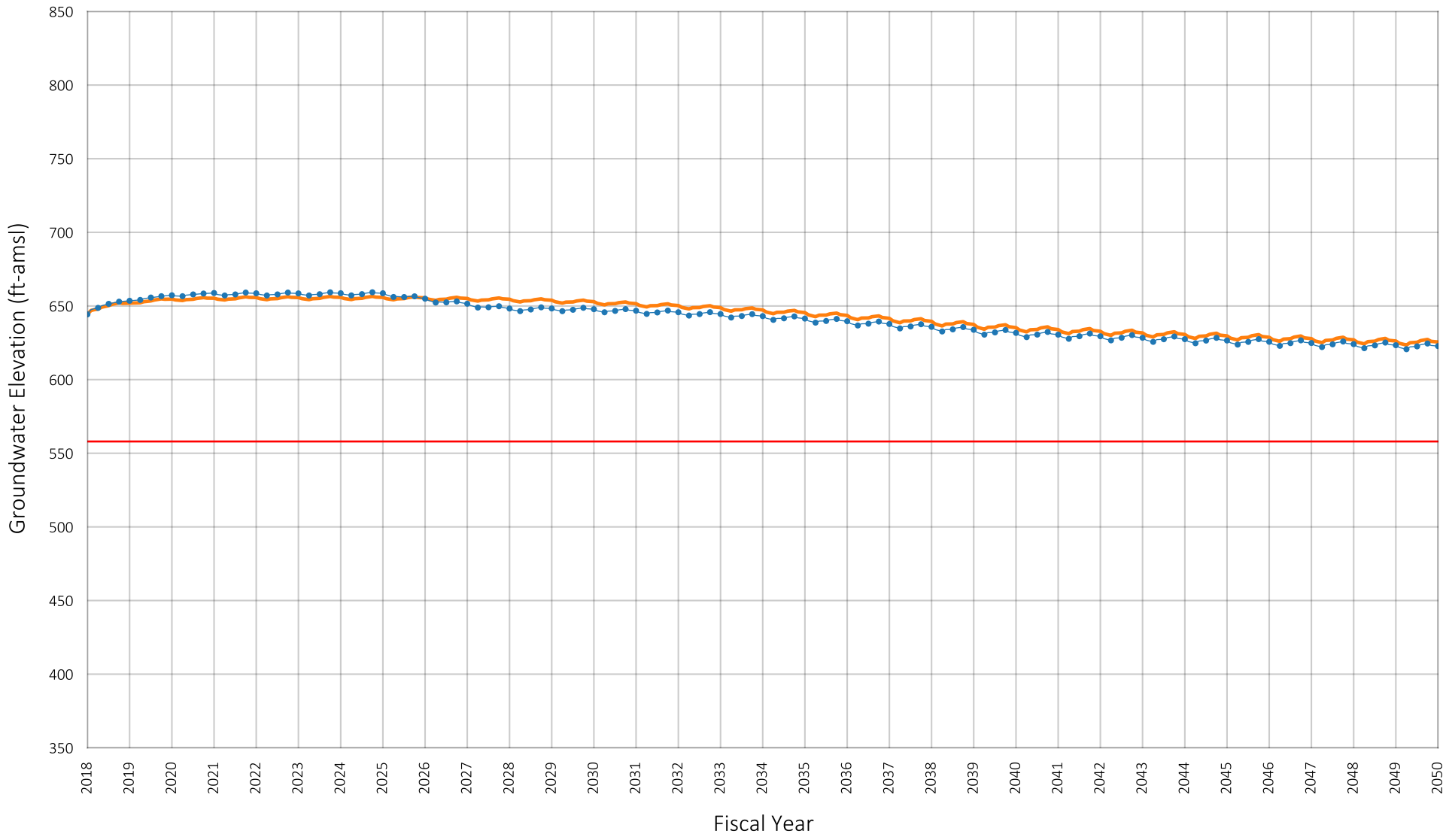
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002333
Owner: City of Ontario
Well Name: 29

Figure A-83



Location of Well in Chino Basin

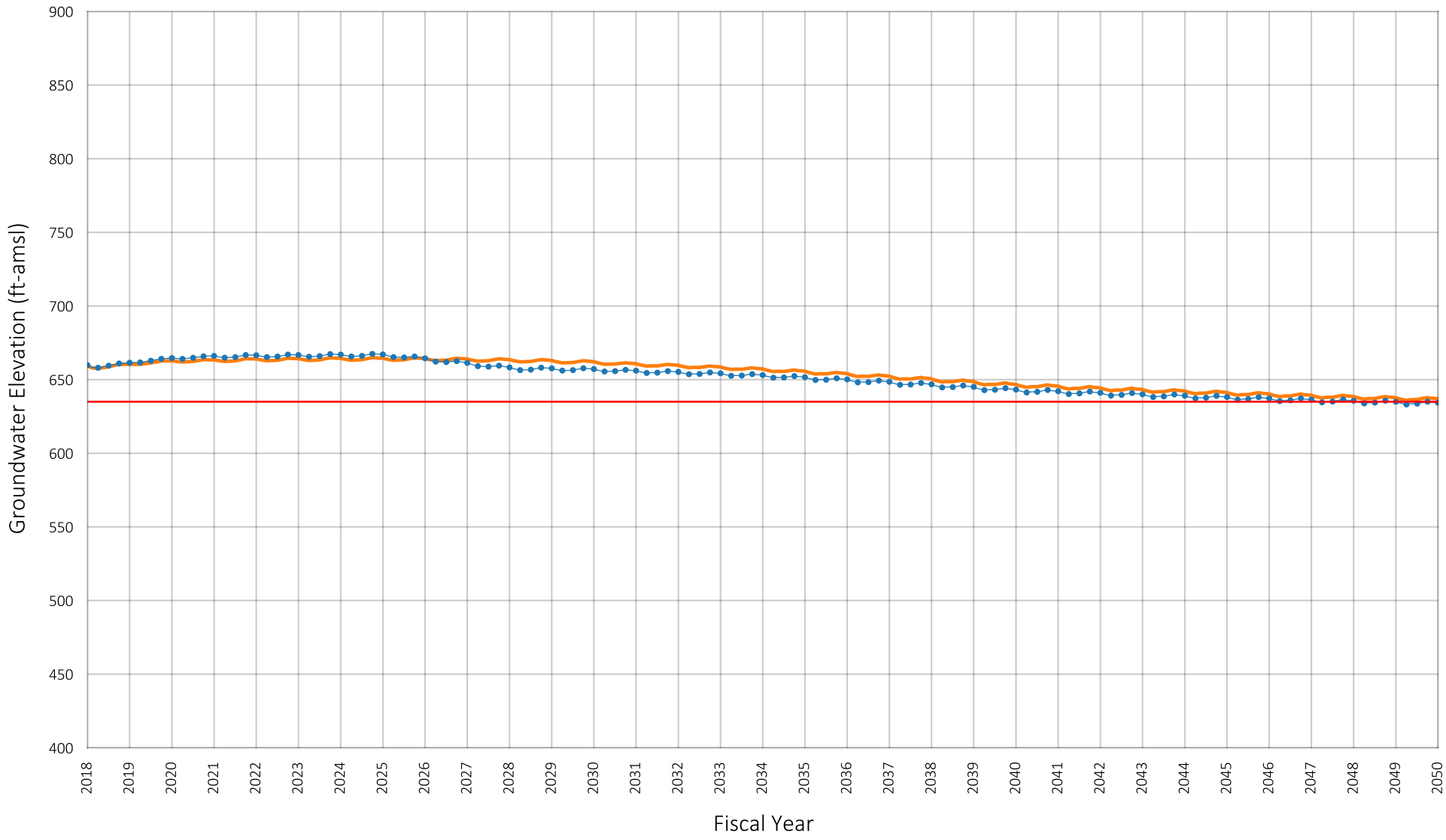
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002253
Owner: City of Ontario
Well Name: 30

Figure A-84



Location of Well in Chino Basin

SYR1

LSLS

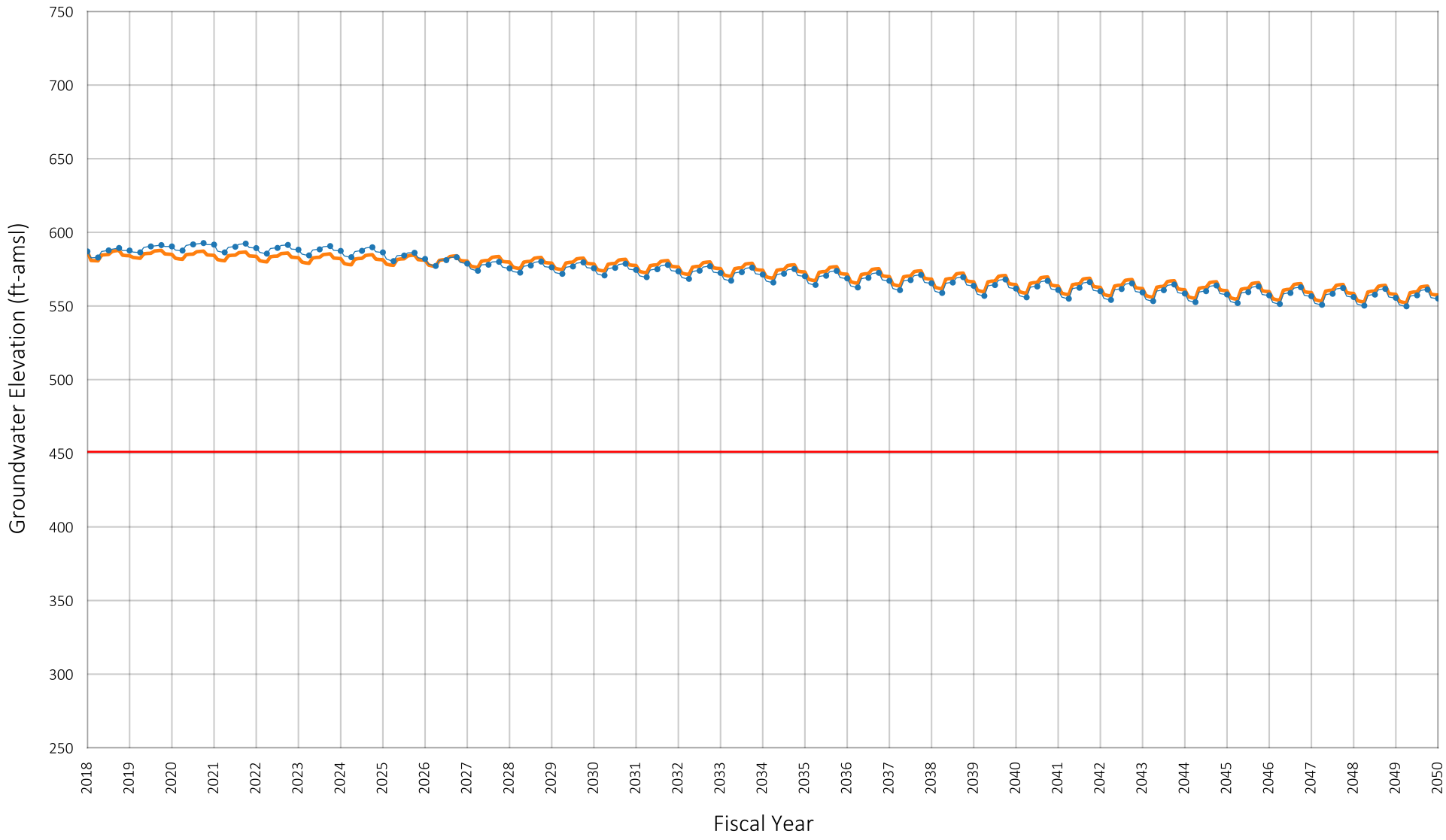
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002254
Owner: City of Ontario
Well Name: 31

Figure A-85



Location of Well in Chino Basin

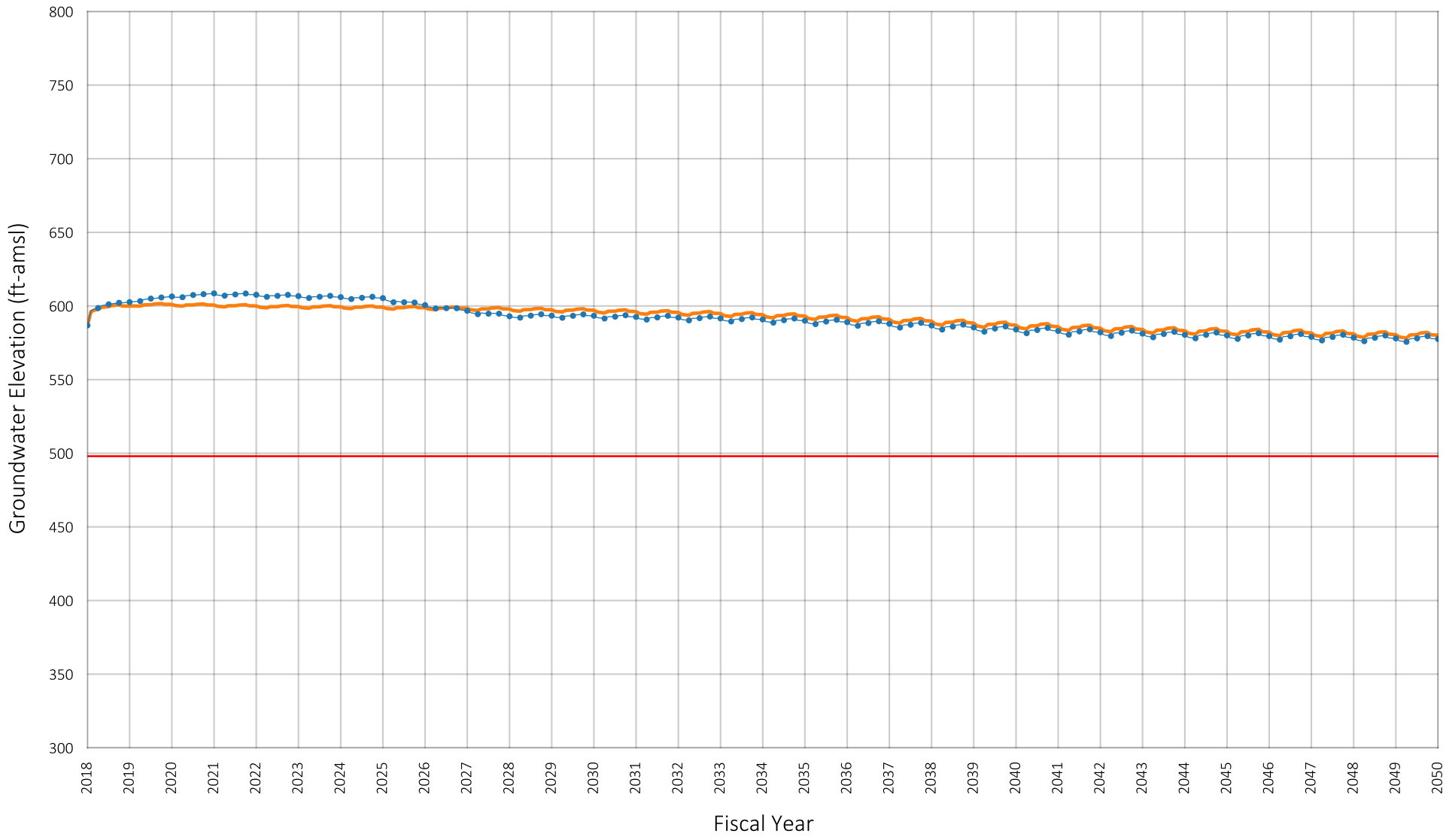
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002367
Owner: City of Ontario
Well Name: 34

Figure A-86



Location of Well in Chino Basin

SYR1

LSLS

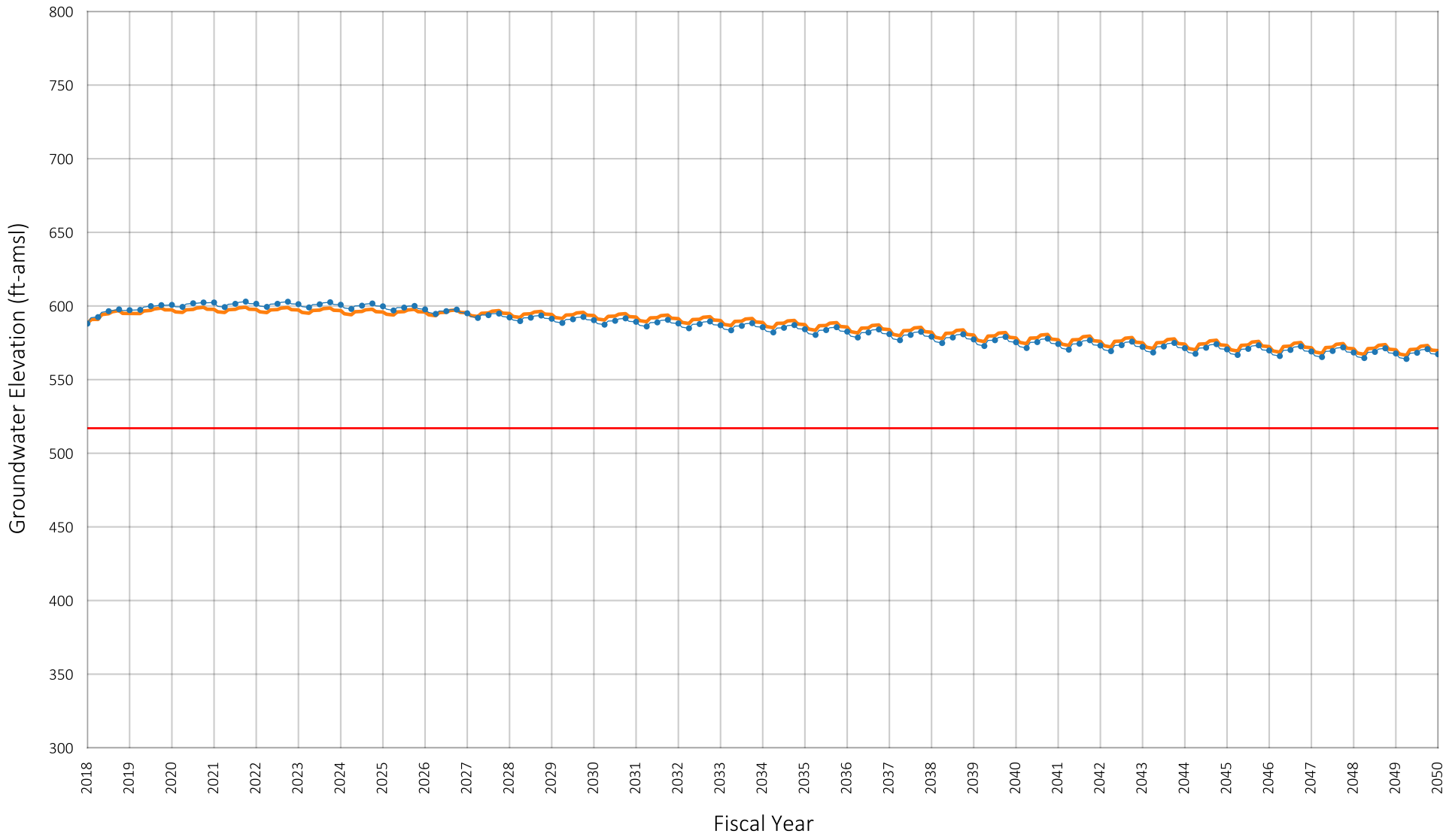
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002350
Owner: City of Ontario
Well Name: 35

Figure A-87



Location of Well in Chino Basin

SYR1

LSLS

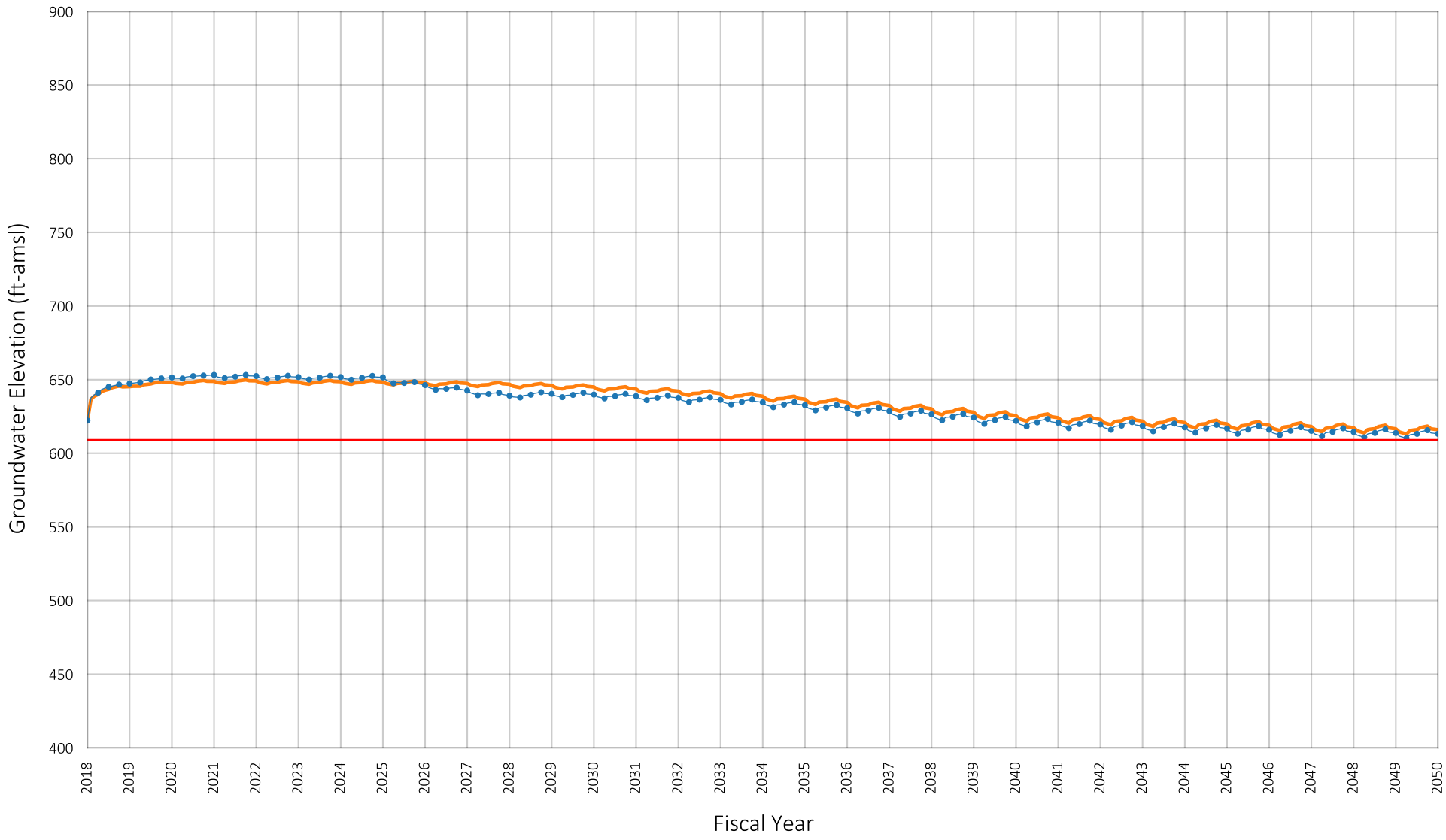
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002372
Owner: City of Ontario
Well Name: 36

Figure A-88



Location of Well in Chino Basin

SYR1

LSLS

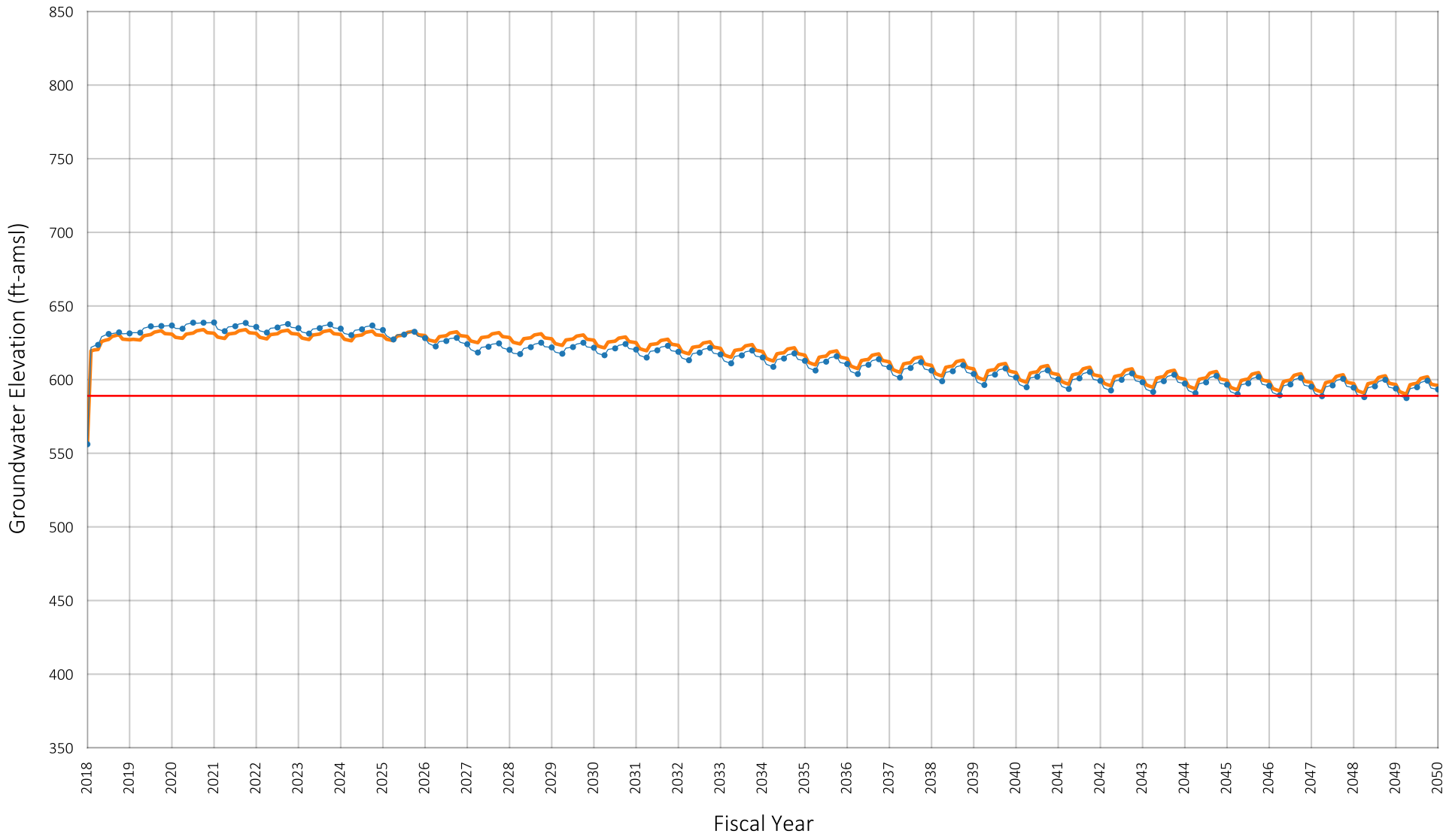
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002230
Owner: City of Ontario
Well Name: 37

Figure A-89



Location of Well in Chino Basin

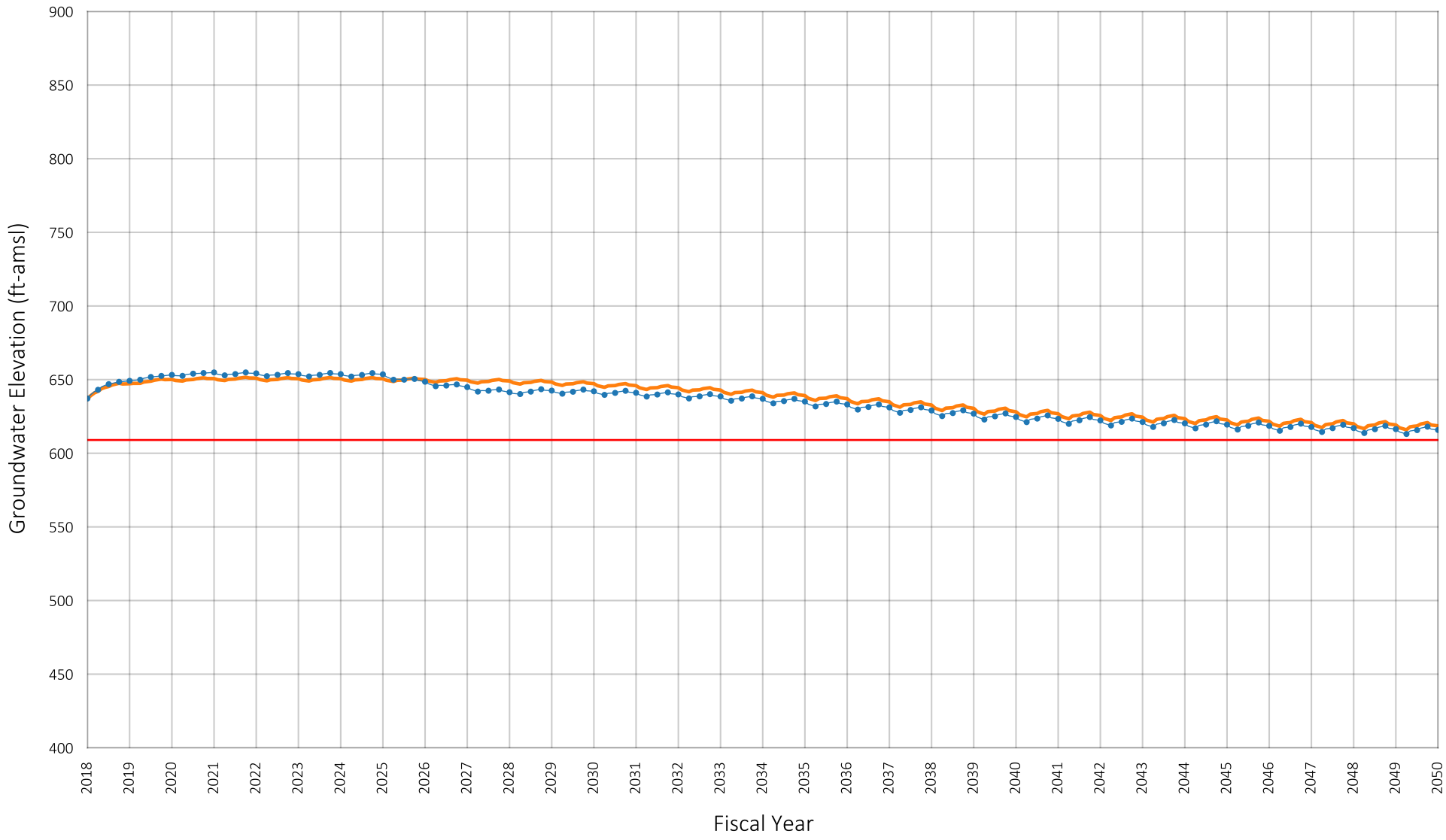
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1006998
Owner: City of Ontario
Well Name: 38

Figure A-90



Location of Well in Chino Basin

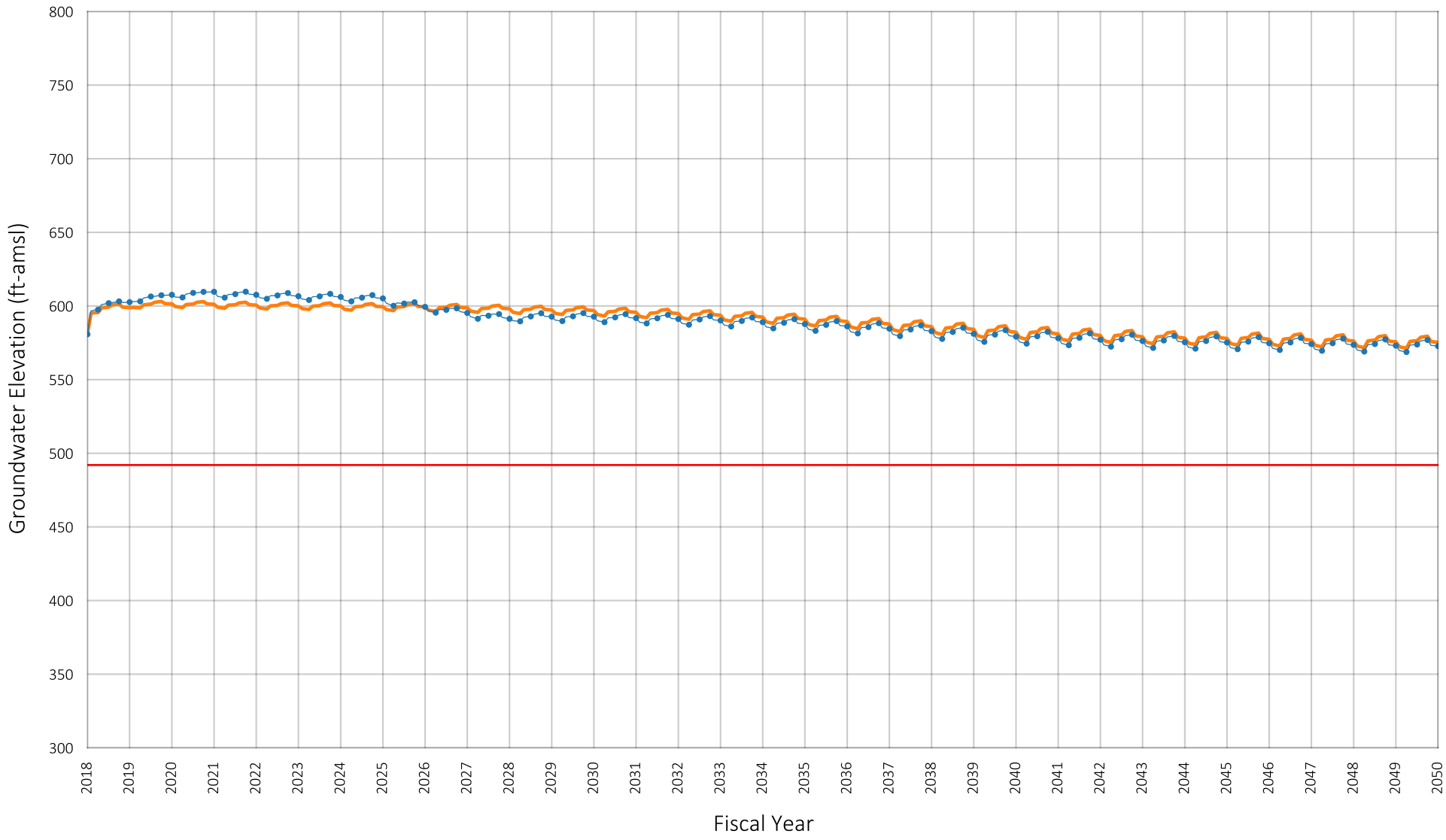
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206945
Owner: City of Ontario
Well Name: 39

Figure A-91



Location of Well in Chino Basin

SYR1

LSLS

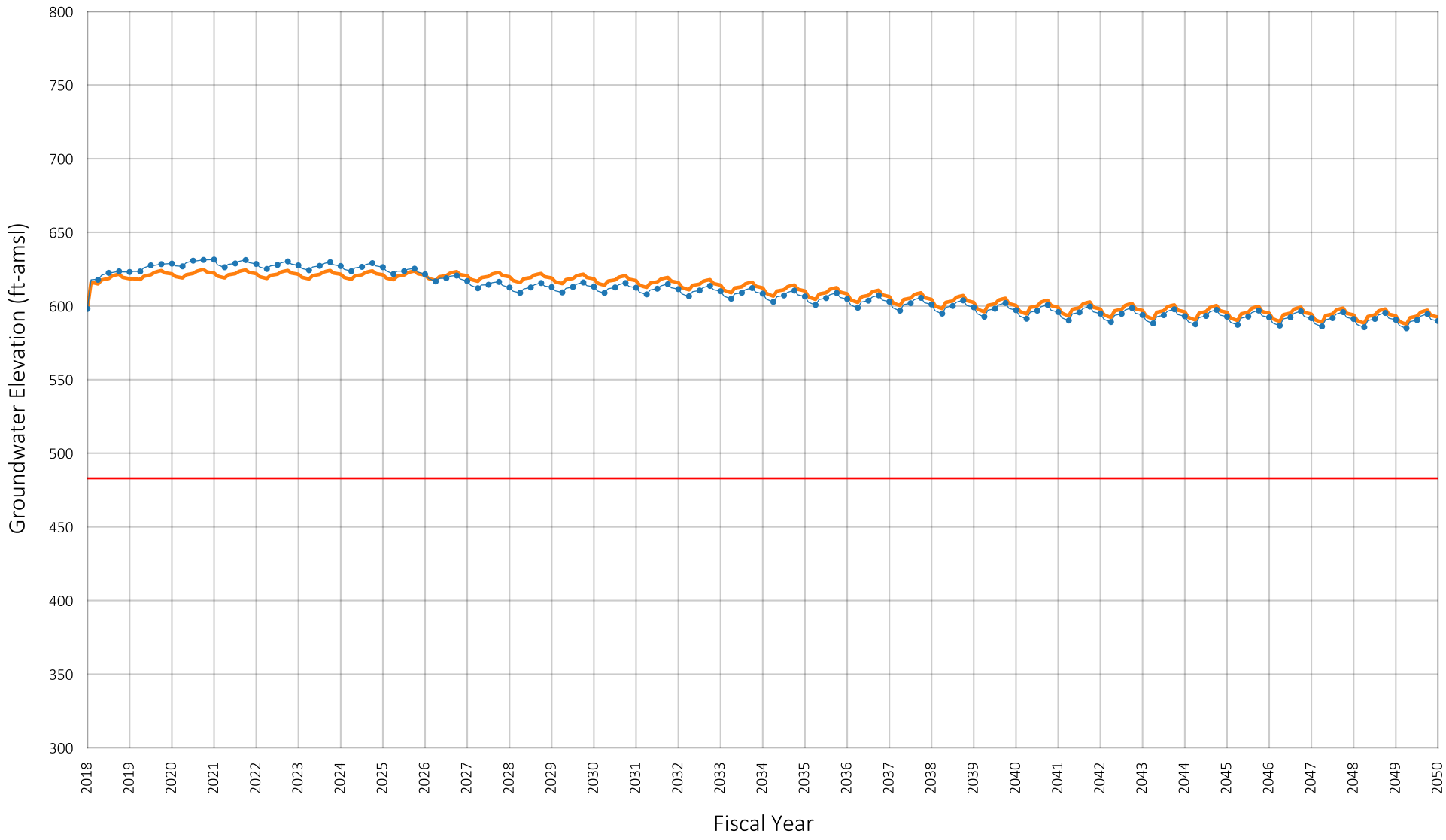
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207502
Owner: City of Ontario
Well Name: 40

Figure A-92



Location of Well in Chino Basin

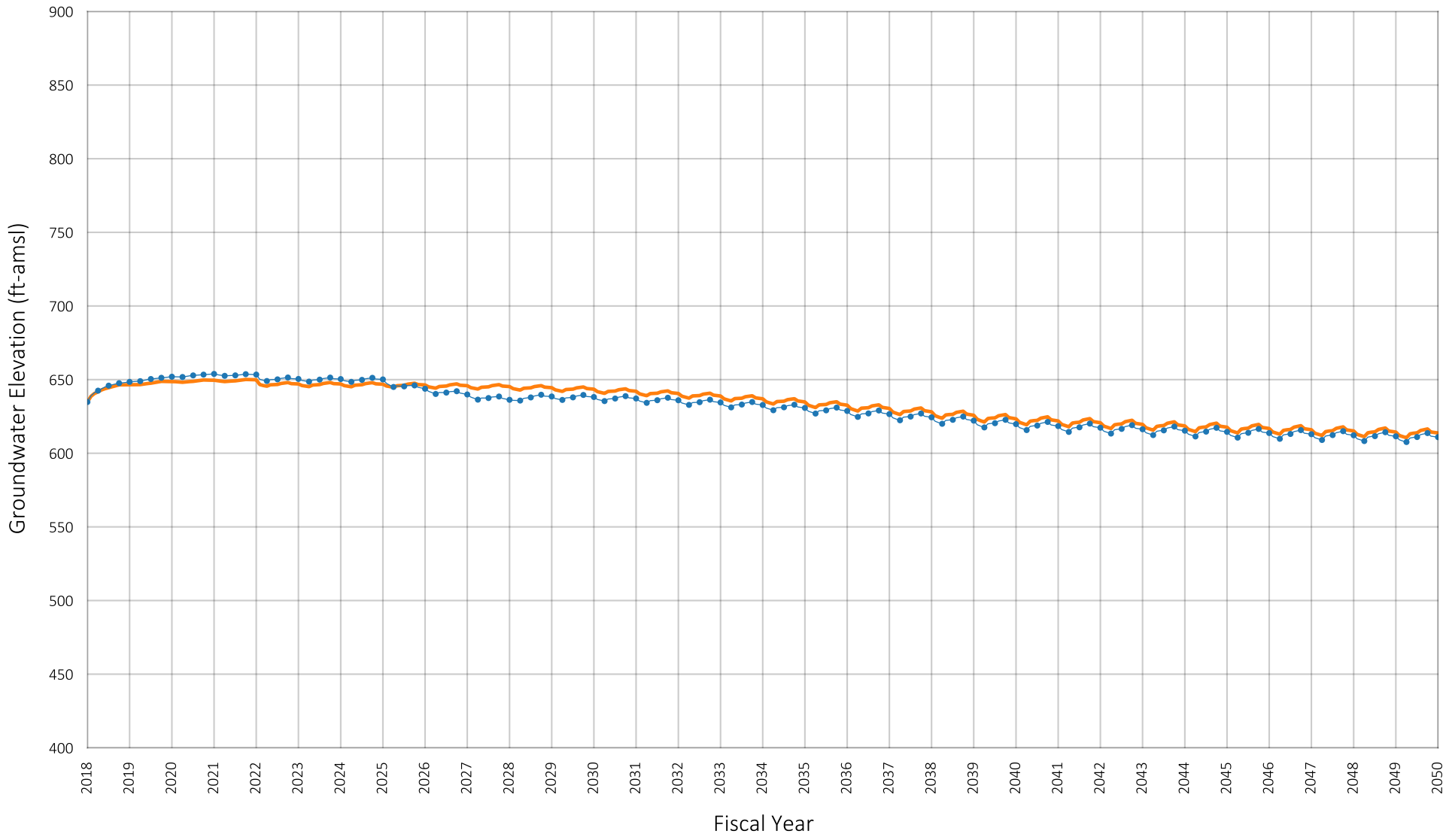
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207503
Owner: City of Ontario
Well Name: 41

Figure A-93



Location of Well in Chino Basin

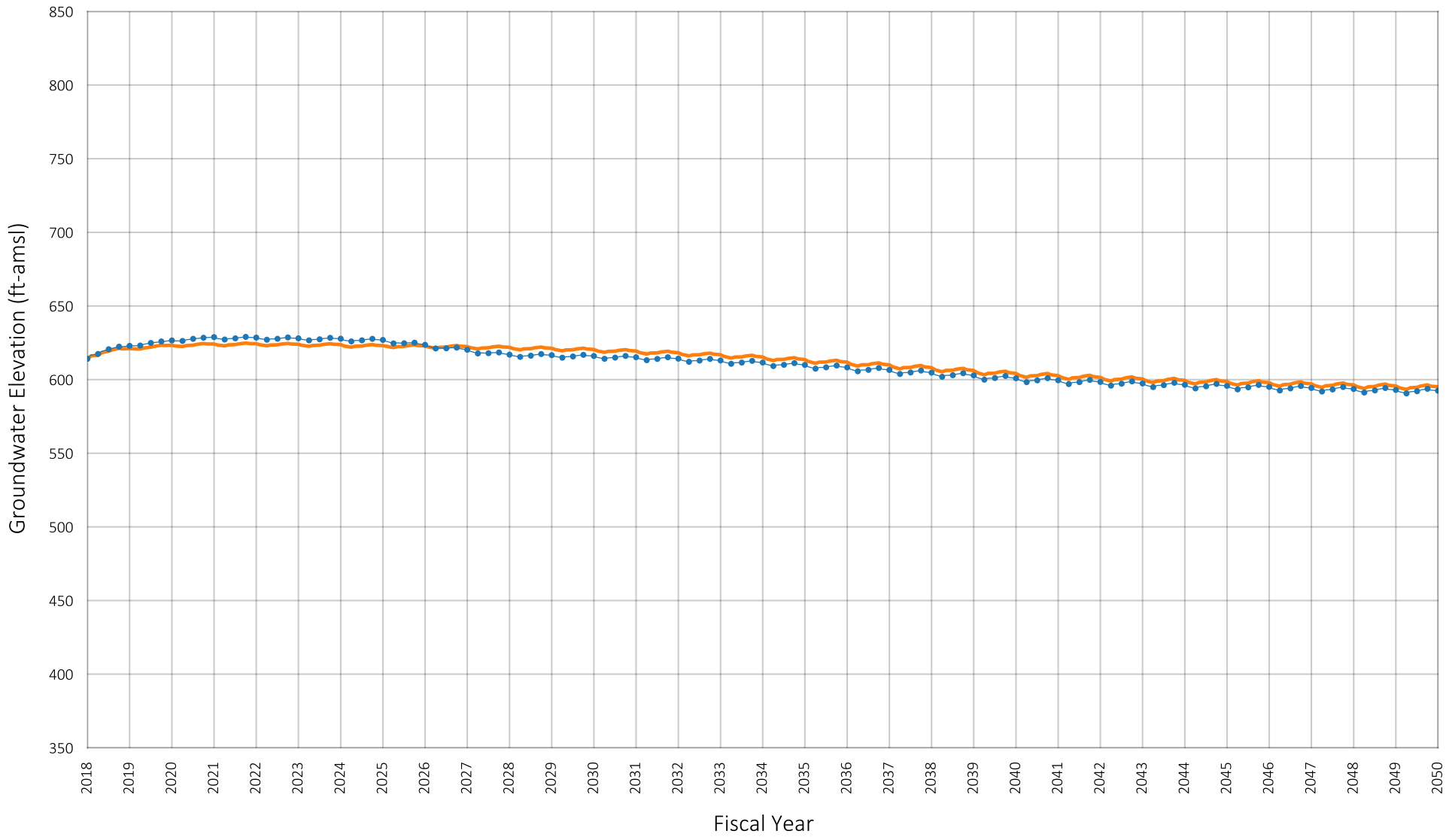
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1220168
Owner: City of Ontario
Well Name: 42

Figure A-94



Location of Well in Chino Basin

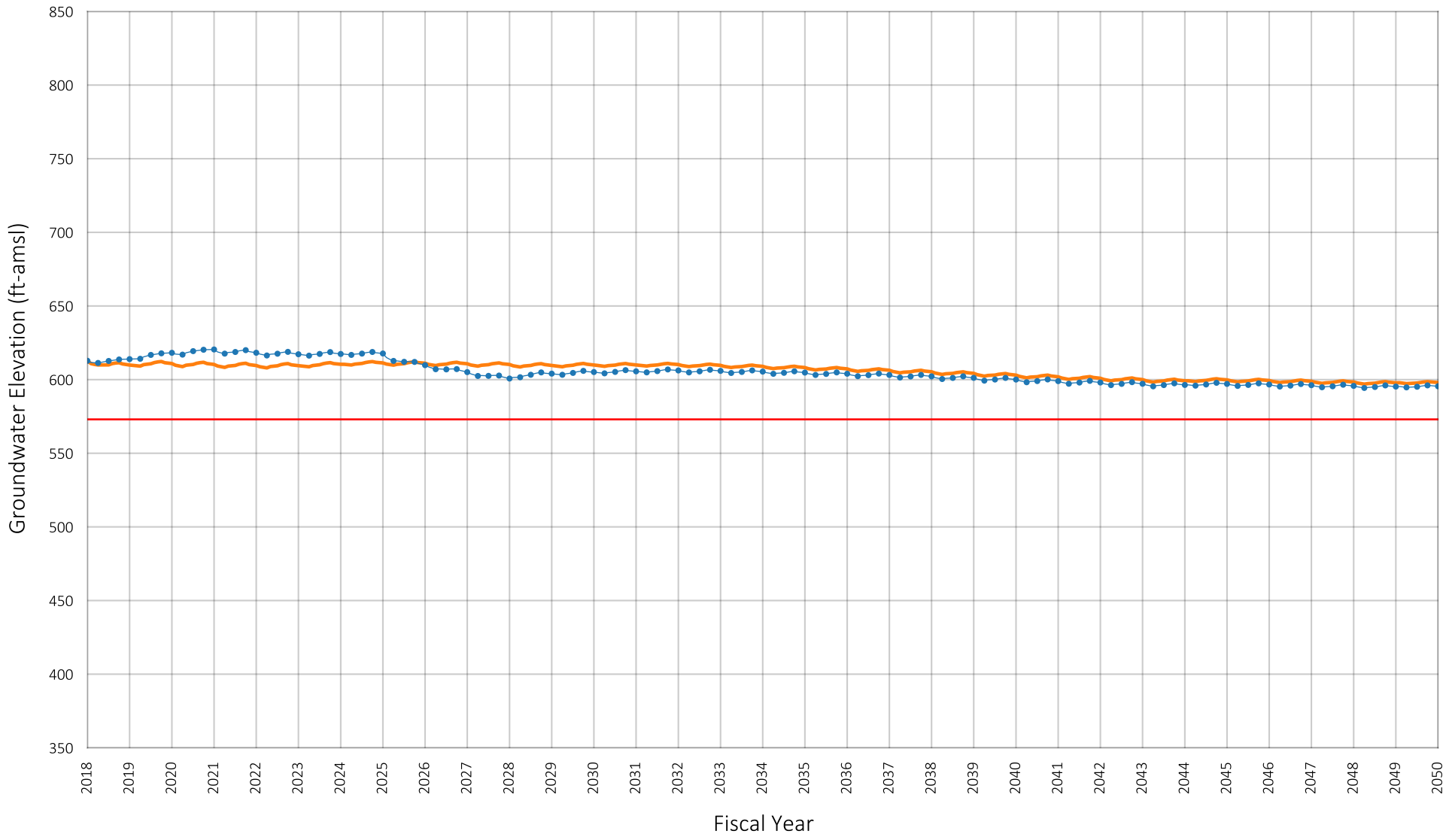
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1220169
Owner: City of Ontario
Well Name: 43

Figure A-95



Location of Well in Chino Basin

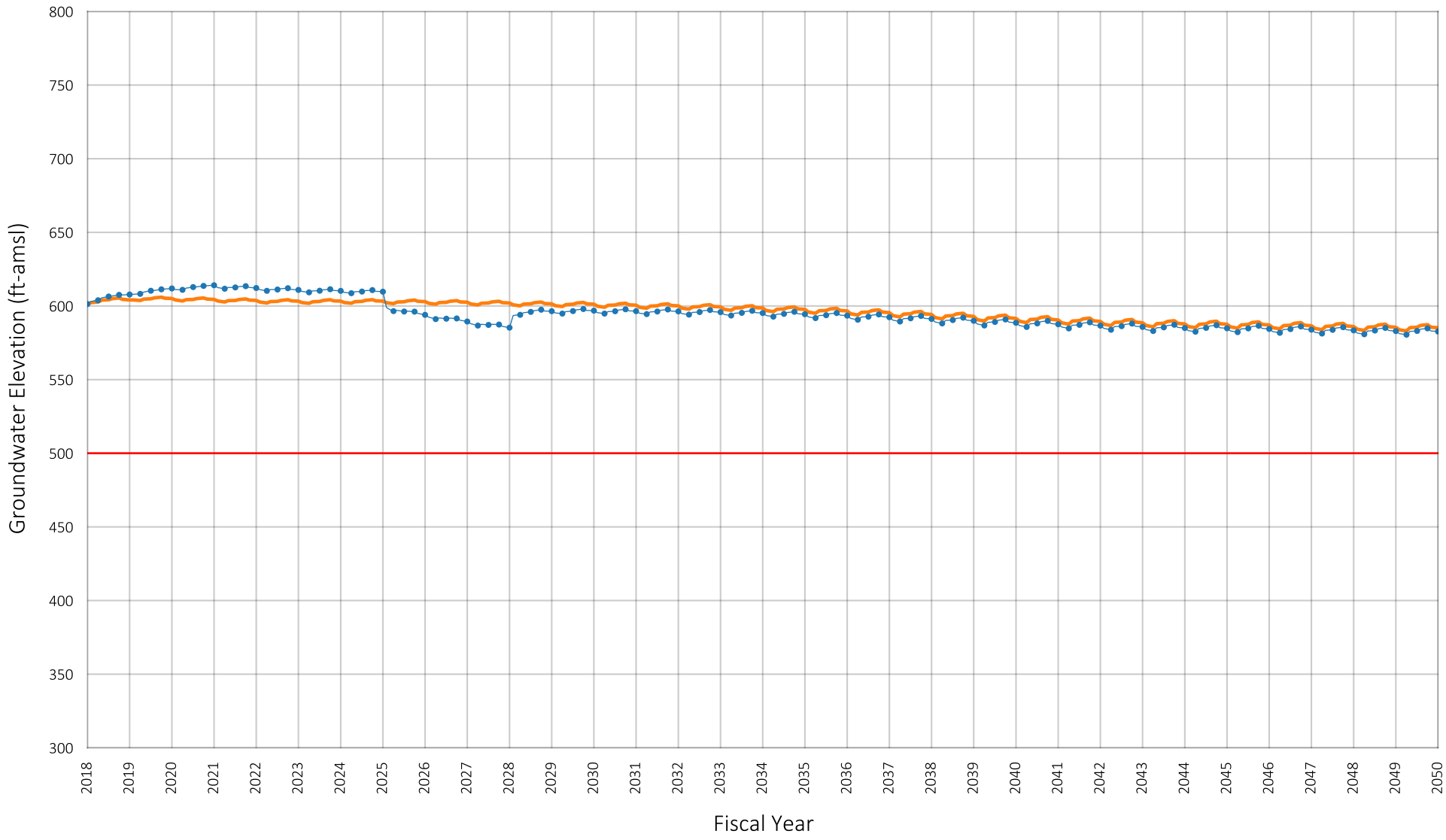
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1220170
Owner: City of Ontario
Well Name: 44

Figure A-96



Location of Well in Chino Basin

SYR1

LSLS

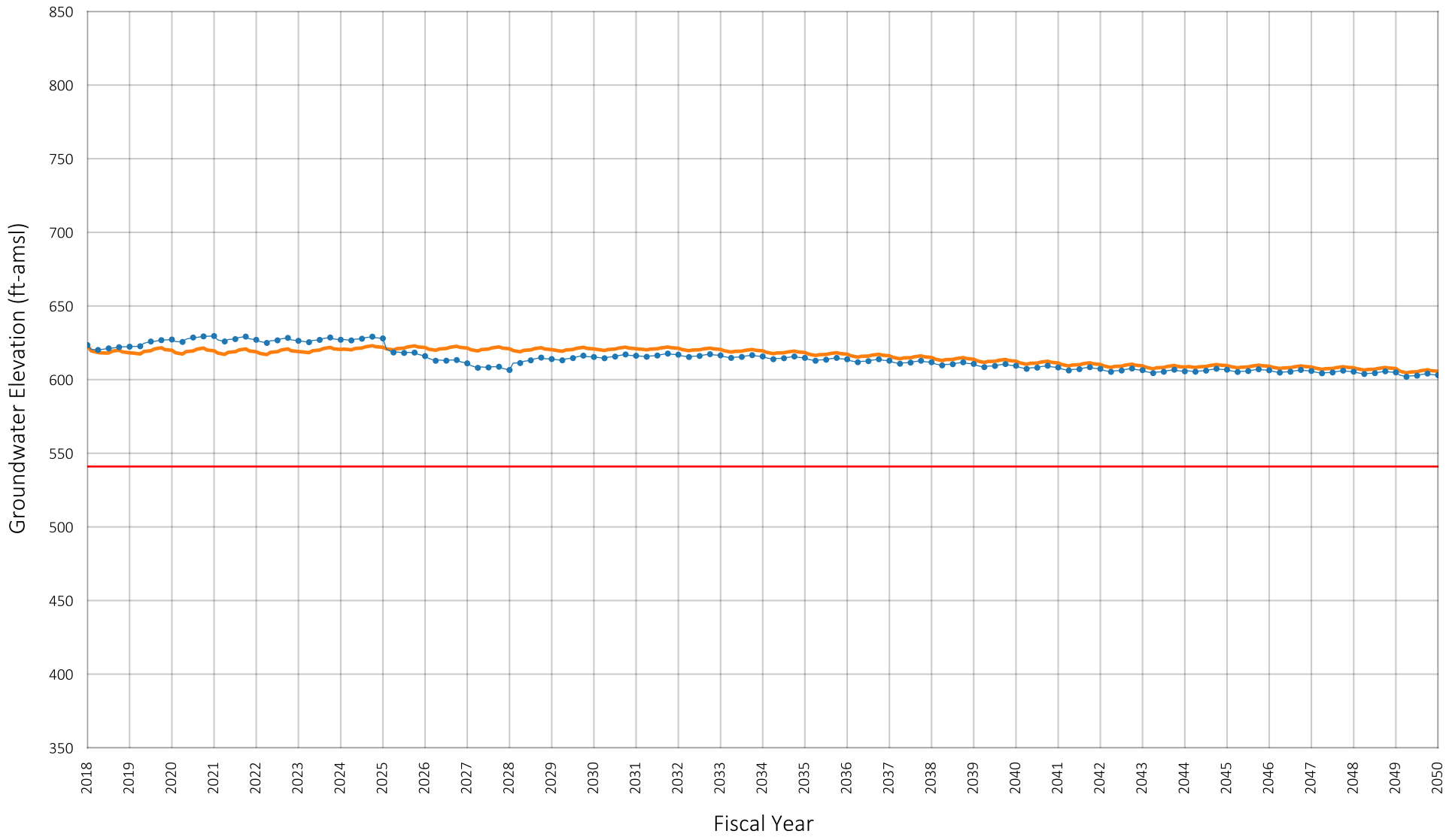
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207950
Owner: City of Ontario
Well Name: 45

Figure A-97



Location of Well in Chino Basin

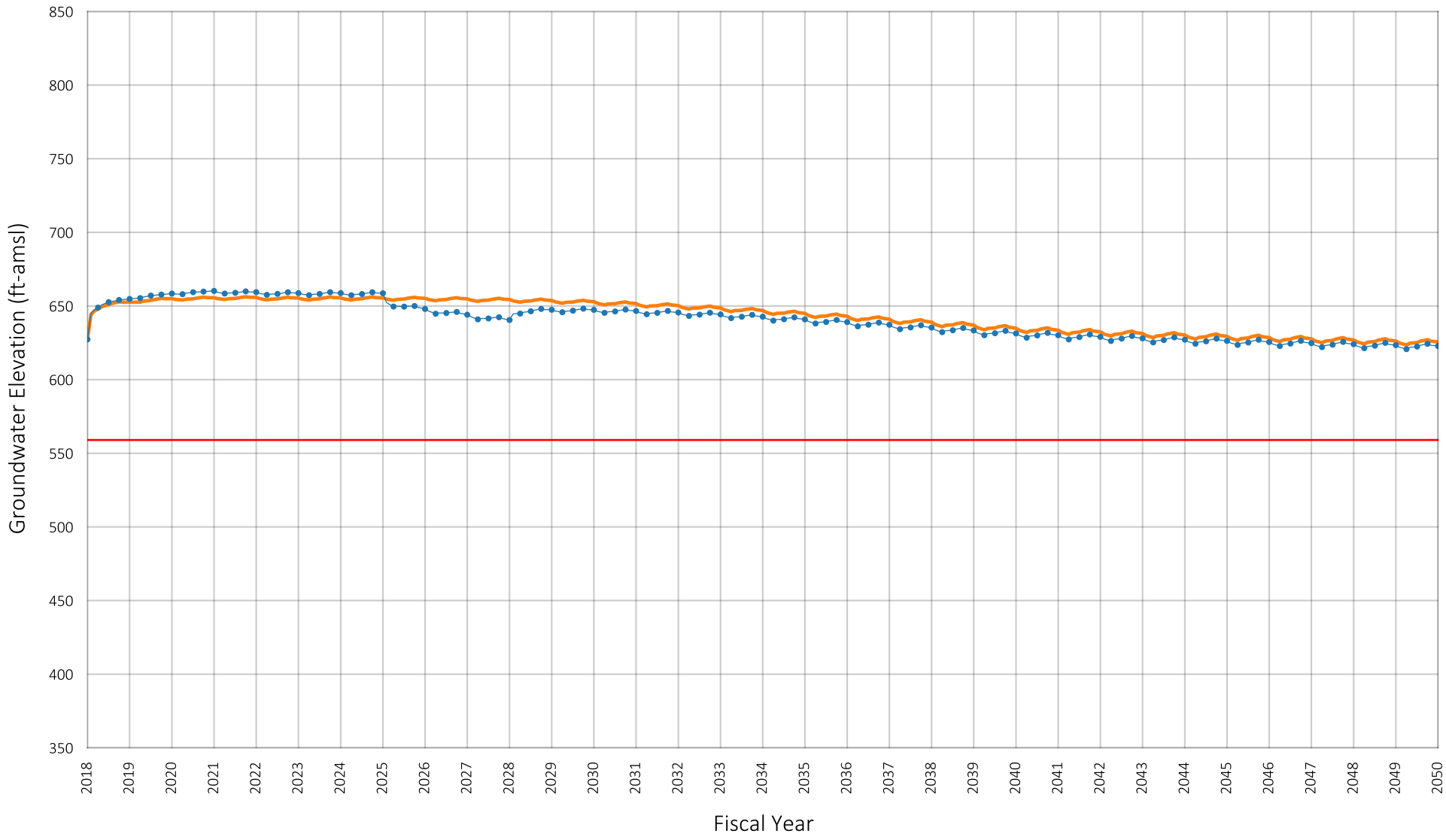
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207946
Owner: City of Ontario
Well Name: 46

Figure A-98



Location of Well in Chino Basin

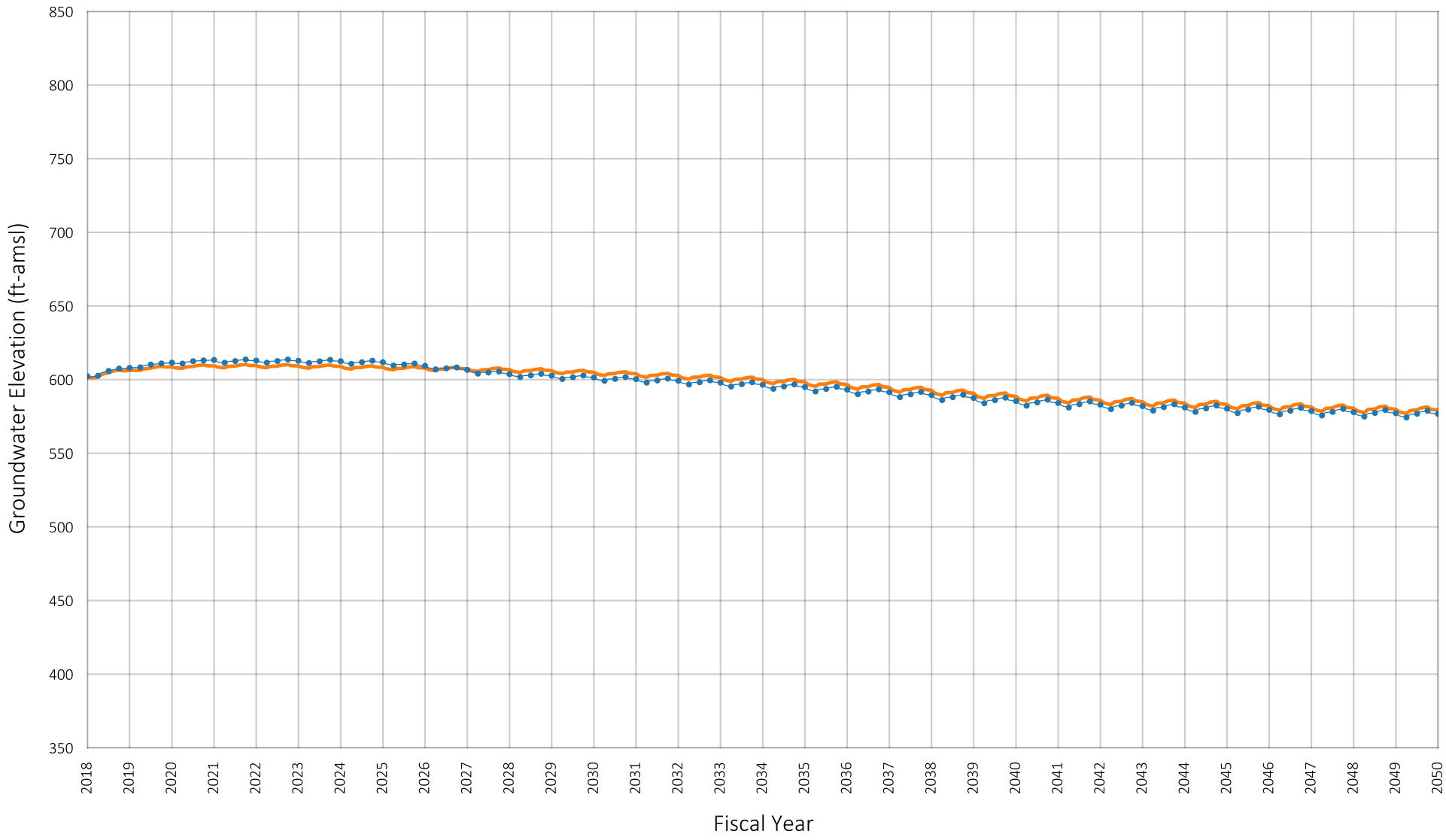
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207948
Owner: City of Ontario
Well Name: 47

Figure A-99



Location of Well in Chino Basin

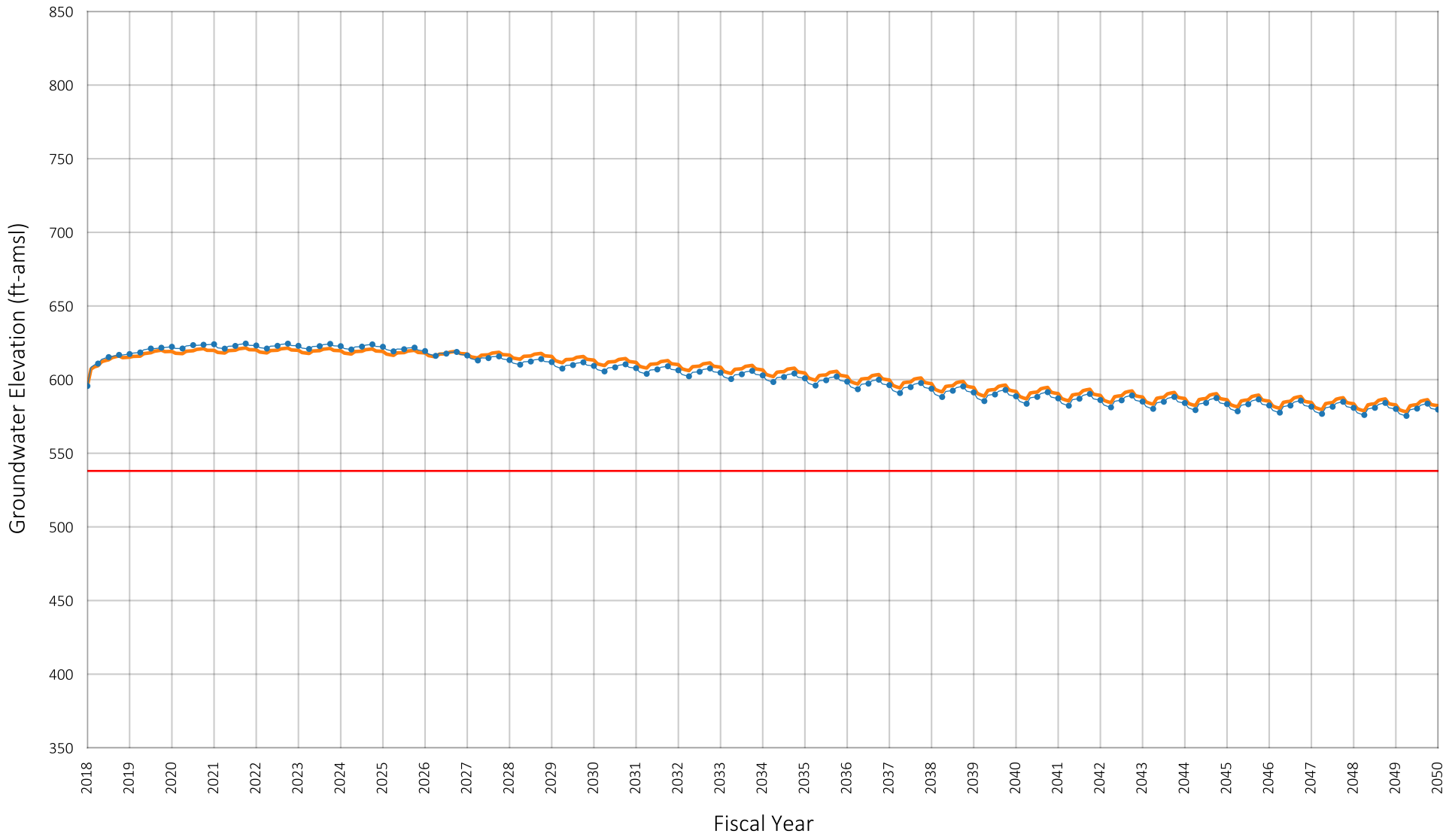
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1220171
Owner: City of Ontario
Well Name: 48

Figure A-100



Location of Well in Chino Basin

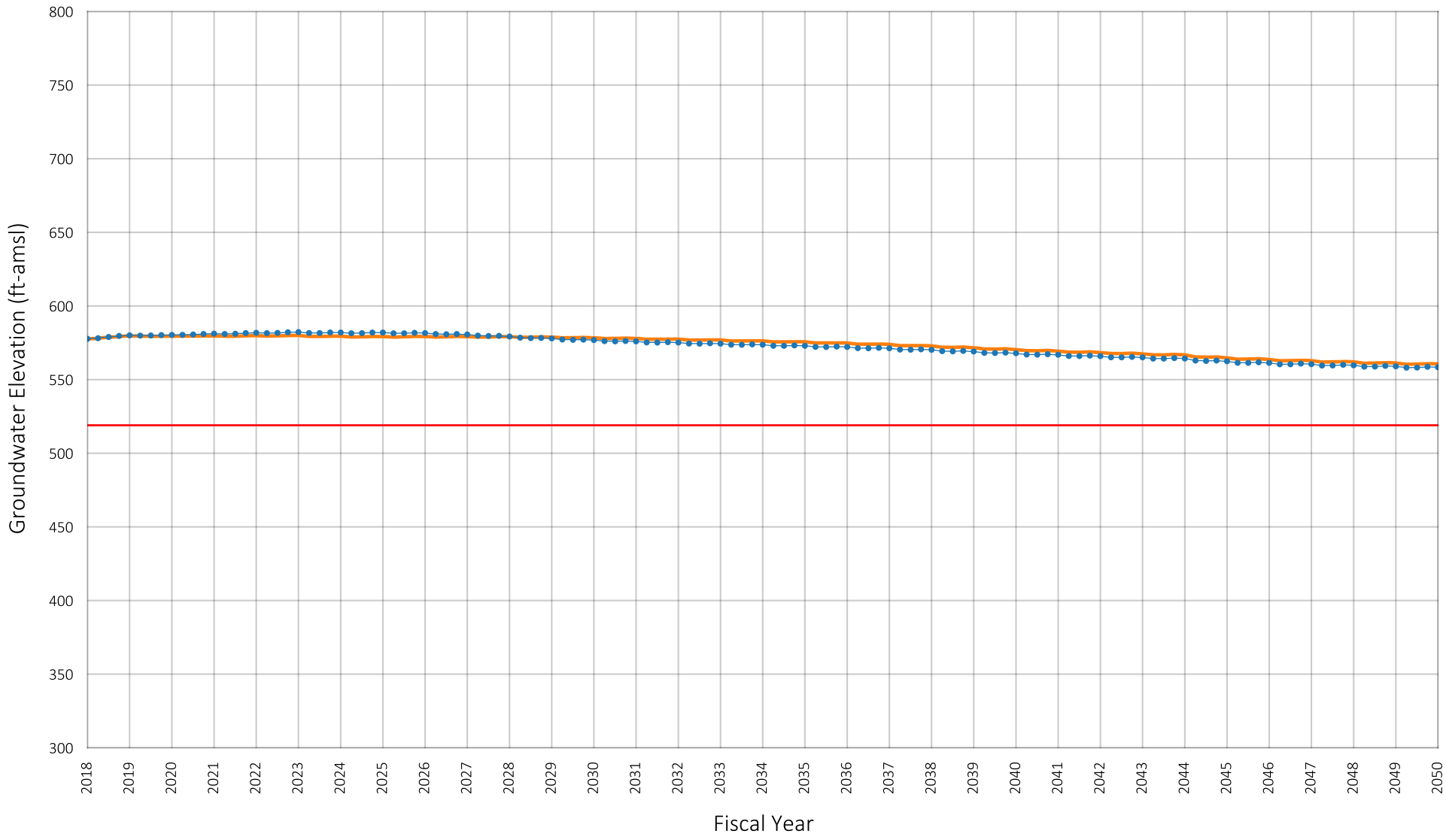
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207952
Owner: City of Ontario
Well Name: 49

Figure A-101



Location of Well in Chino Basin

SYR1

LSLS

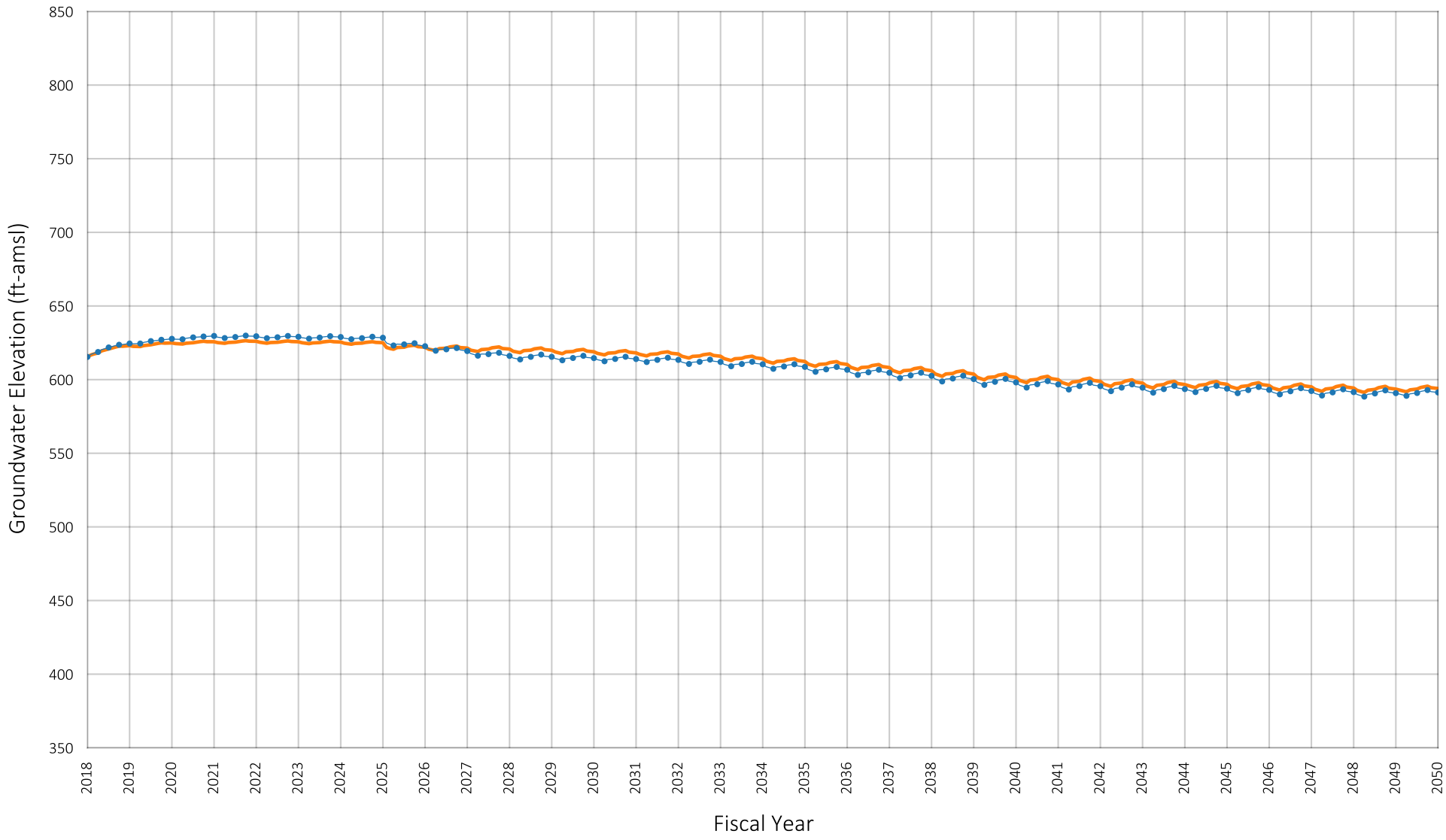
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1208387
Owner: City of Ontario
Well Name: 50

Figure A-102



Location of Well in Chino Basin

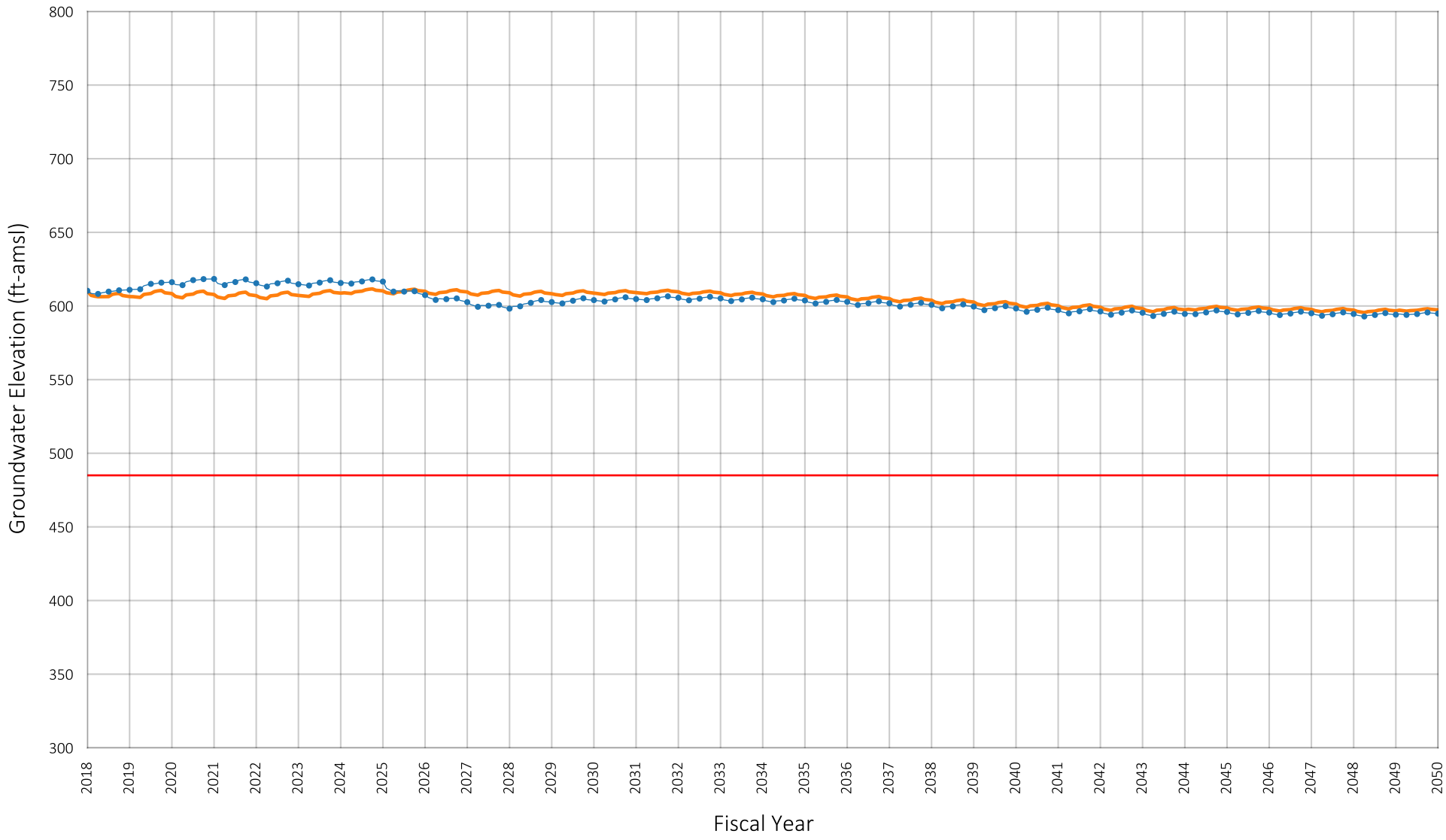
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1220172
Owner: City of Ontario
Well Name: 51

Figure A-103



Location of Well in Chino Basin

SYR1

LSLS

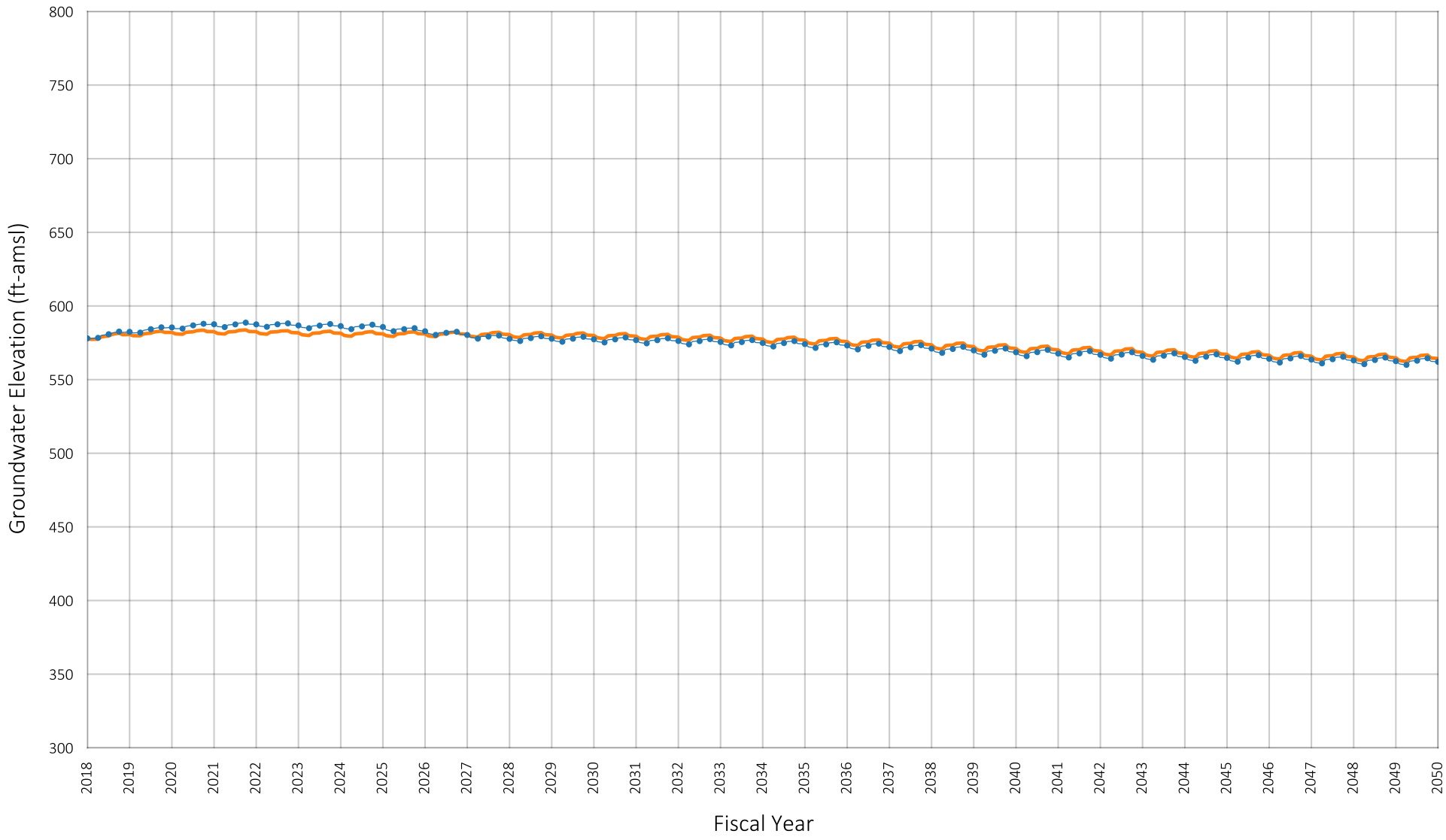
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1221753
Owner: City of Ontario
Well Name: 52

Figure A-104



Location of Well in Chino Basin

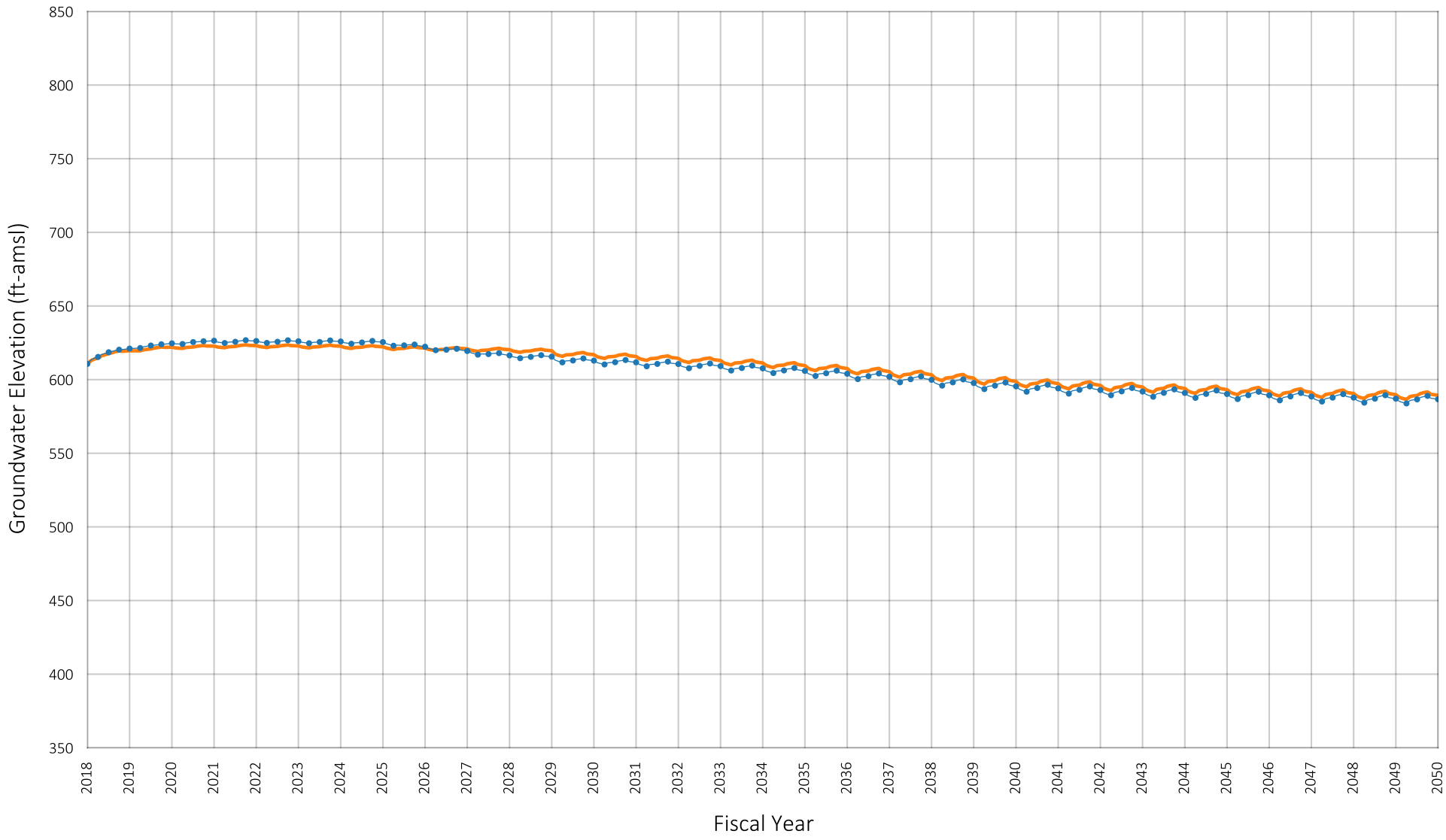
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 100
Owner: City of Ontario
Well Name: 100

Figure A-105



Location of Well in Chino Basin

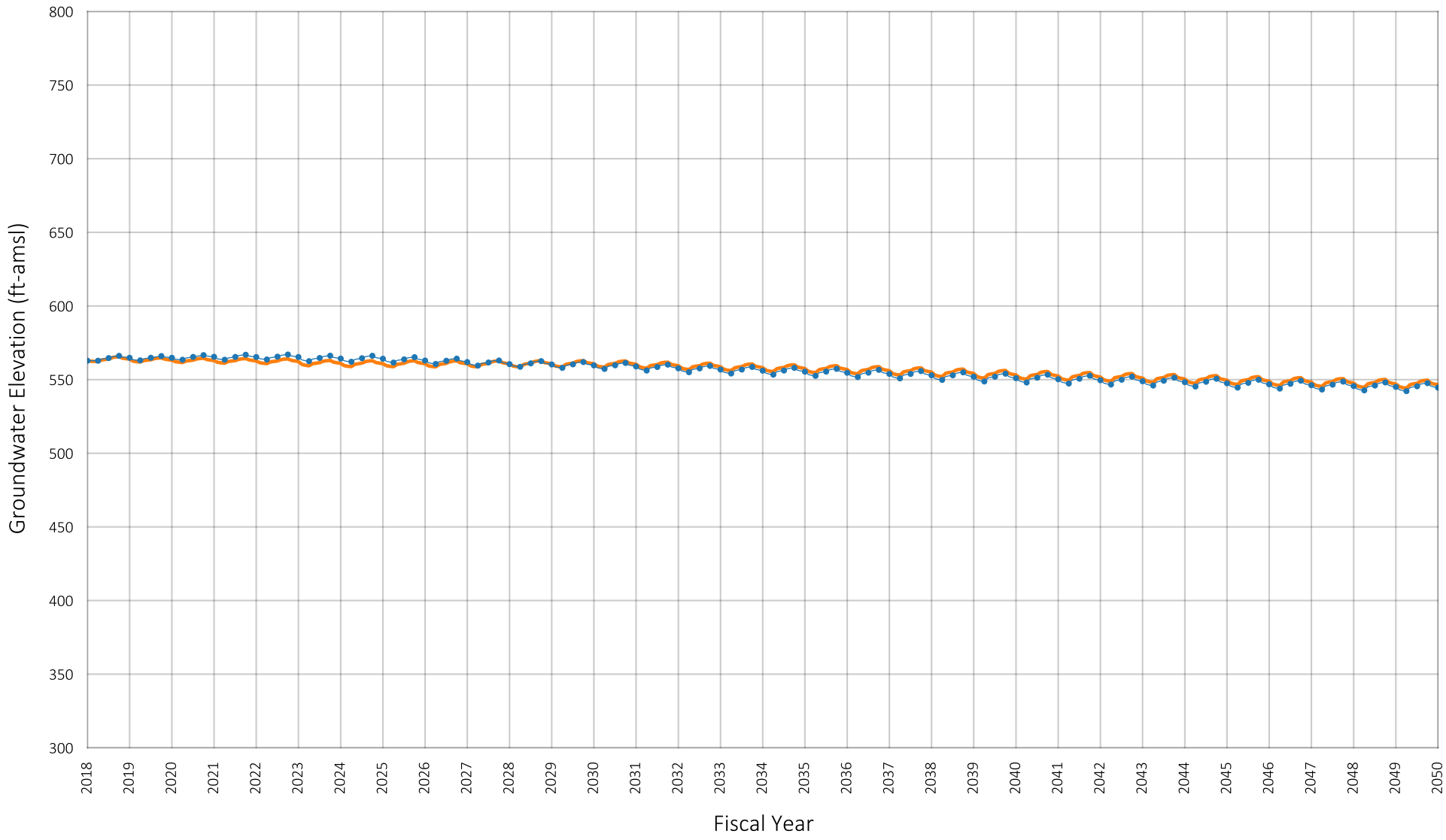
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 101
Owner: City of Ontario
Well Name: 101

Figure A-106



Location of Well in Chino Basin

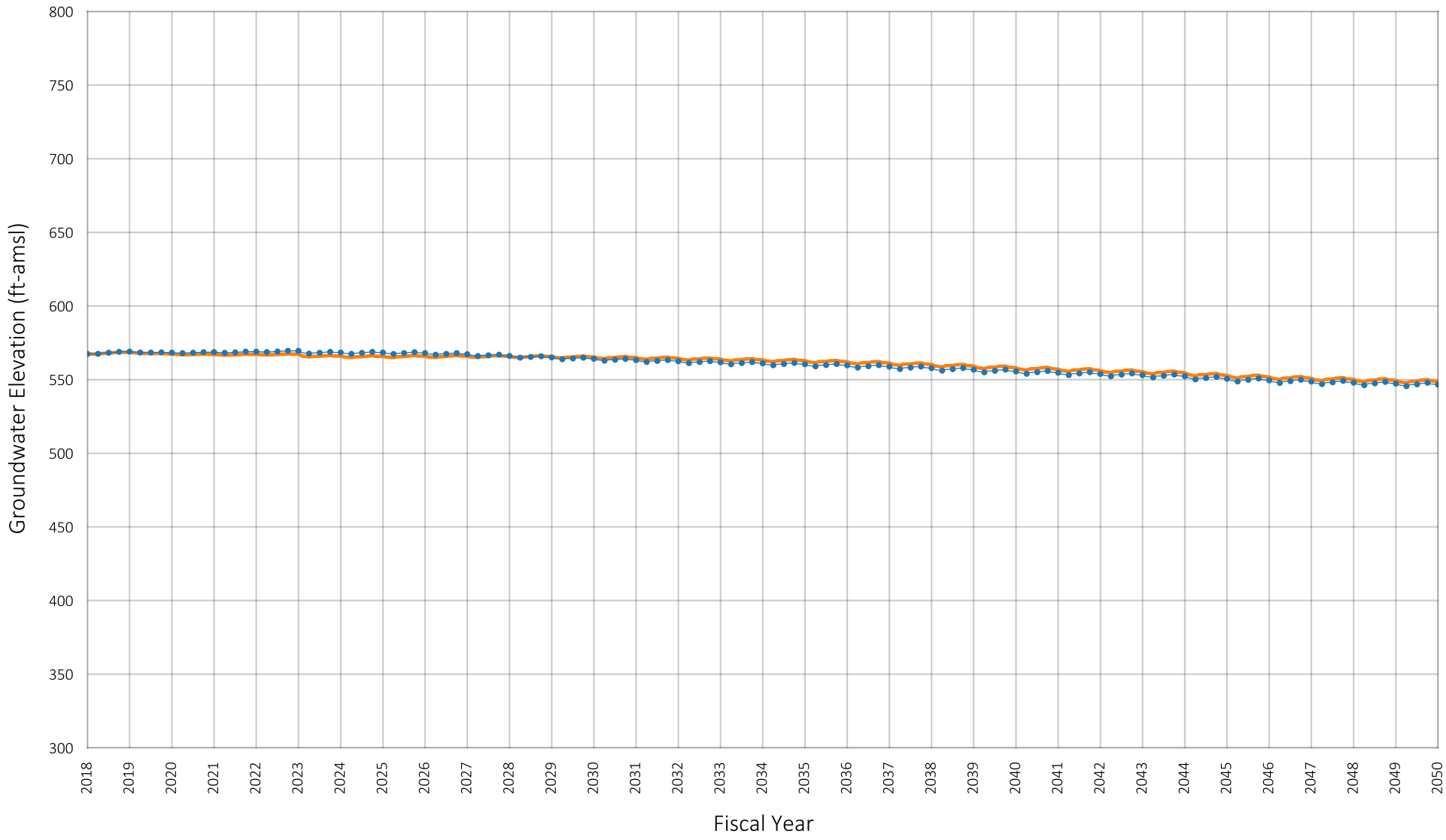
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 103
Owner: City of Ontario
Well Name: 103

Figure A-107



Location of Well in Chino Basin

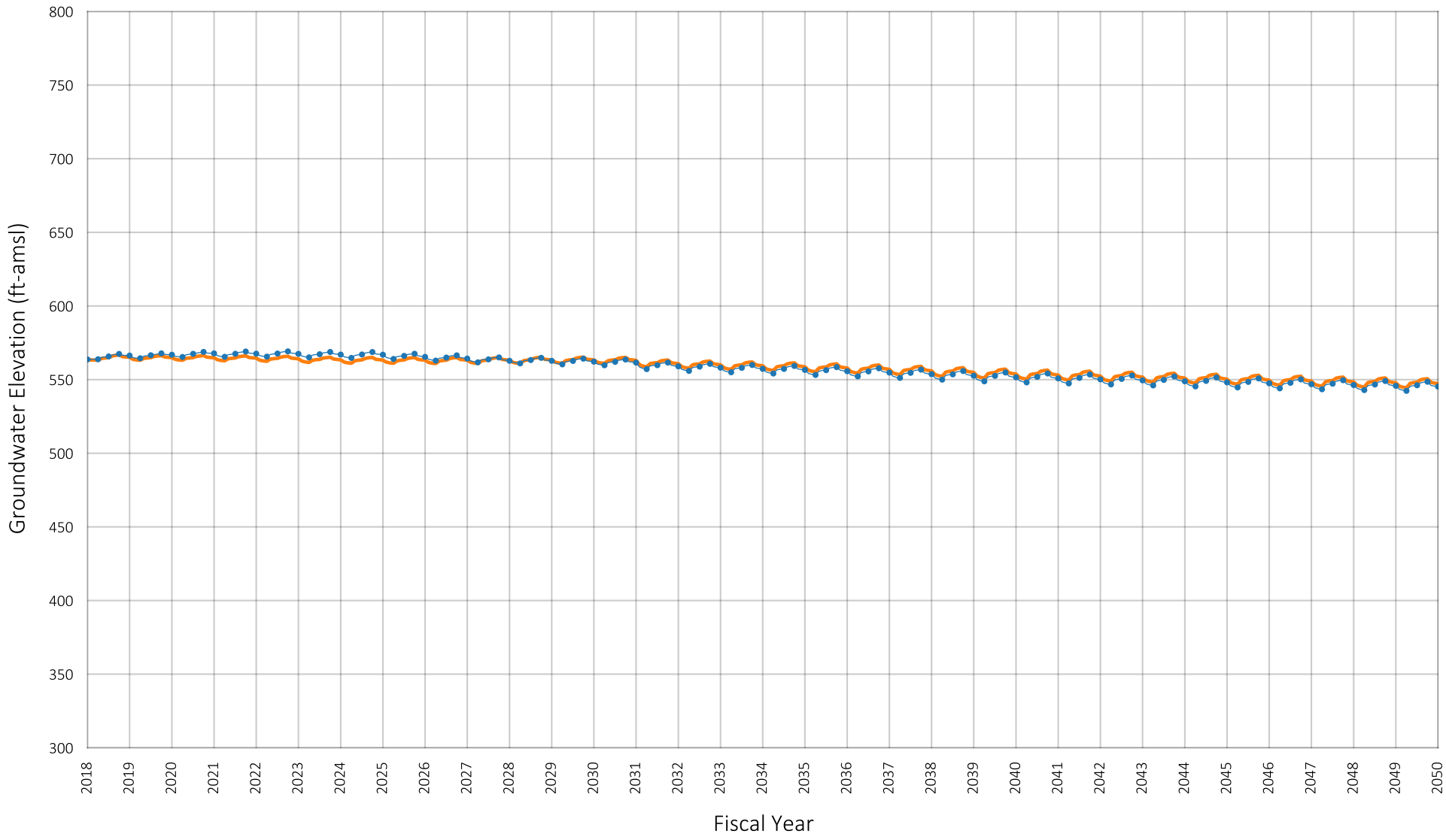
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 104
Owner: City of Ontario
Well Name: 104

Figure A-108



Location of Well in Chino Basin

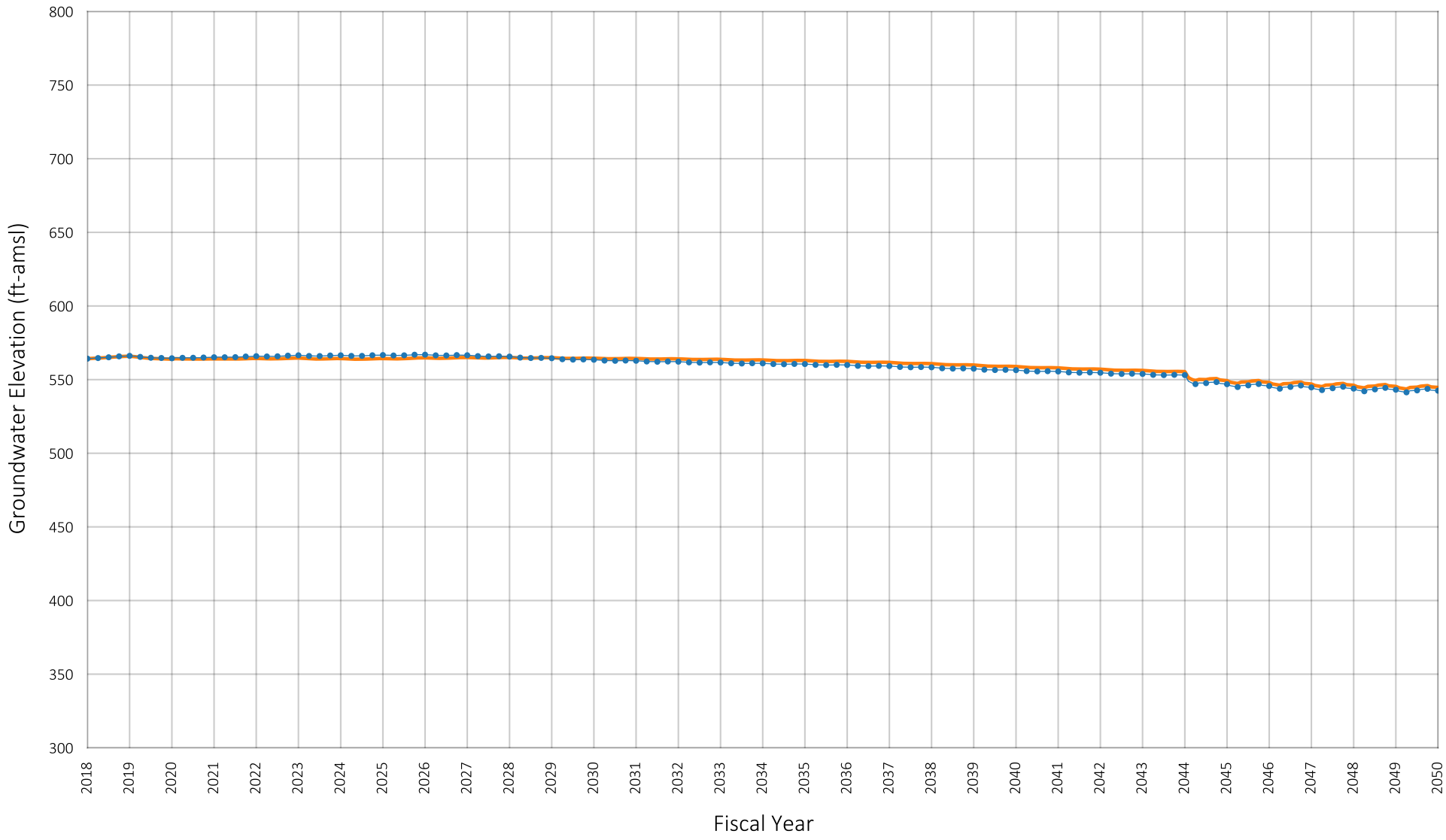
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 105
Owner: City of Ontario
Well Name: 105

Figure A-109



Location of Well in Chino Basin

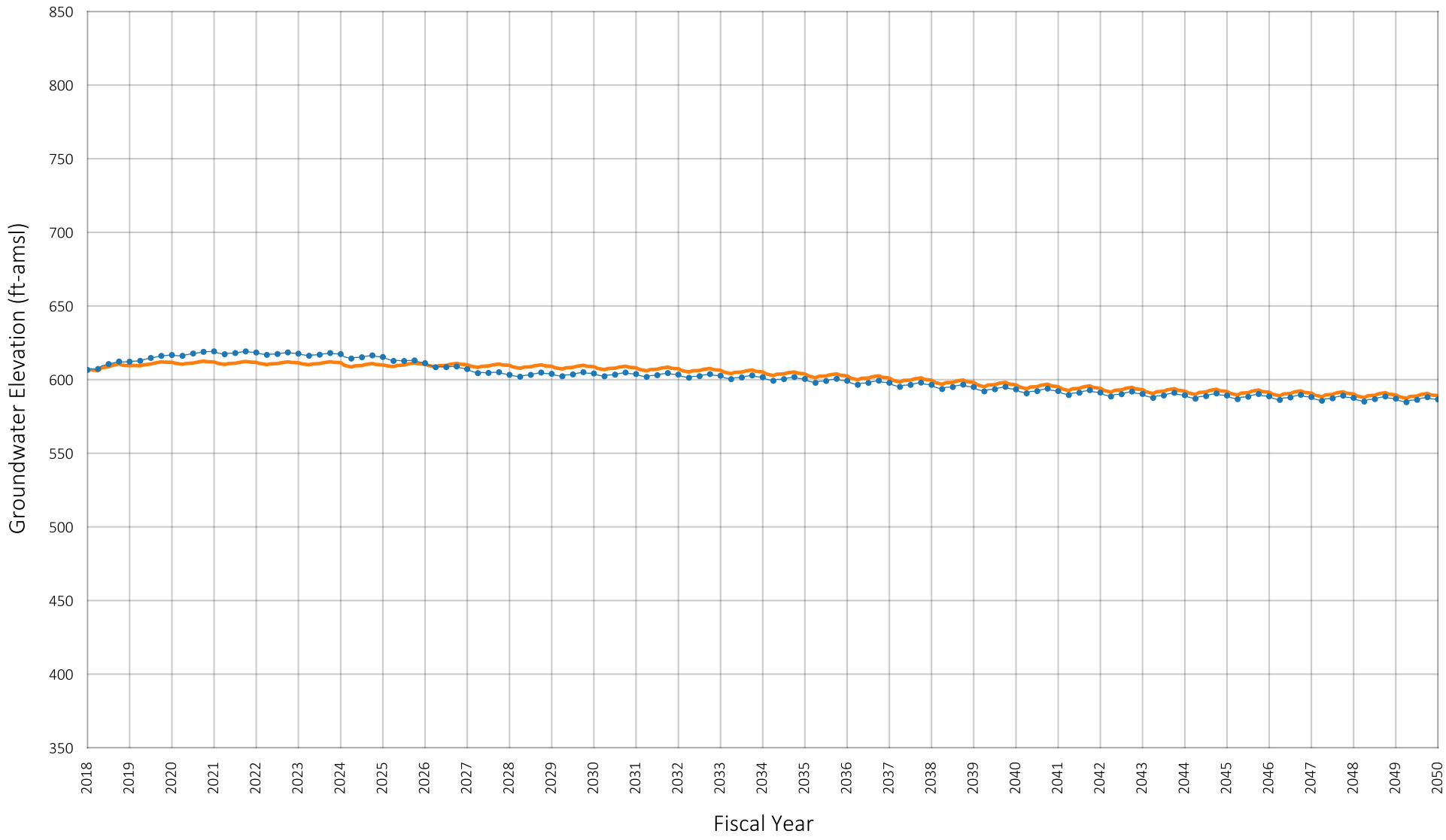
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 106
Owner: City of Ontario
Well Name: 106

Figure A-110



Location of Well in Chino Basin

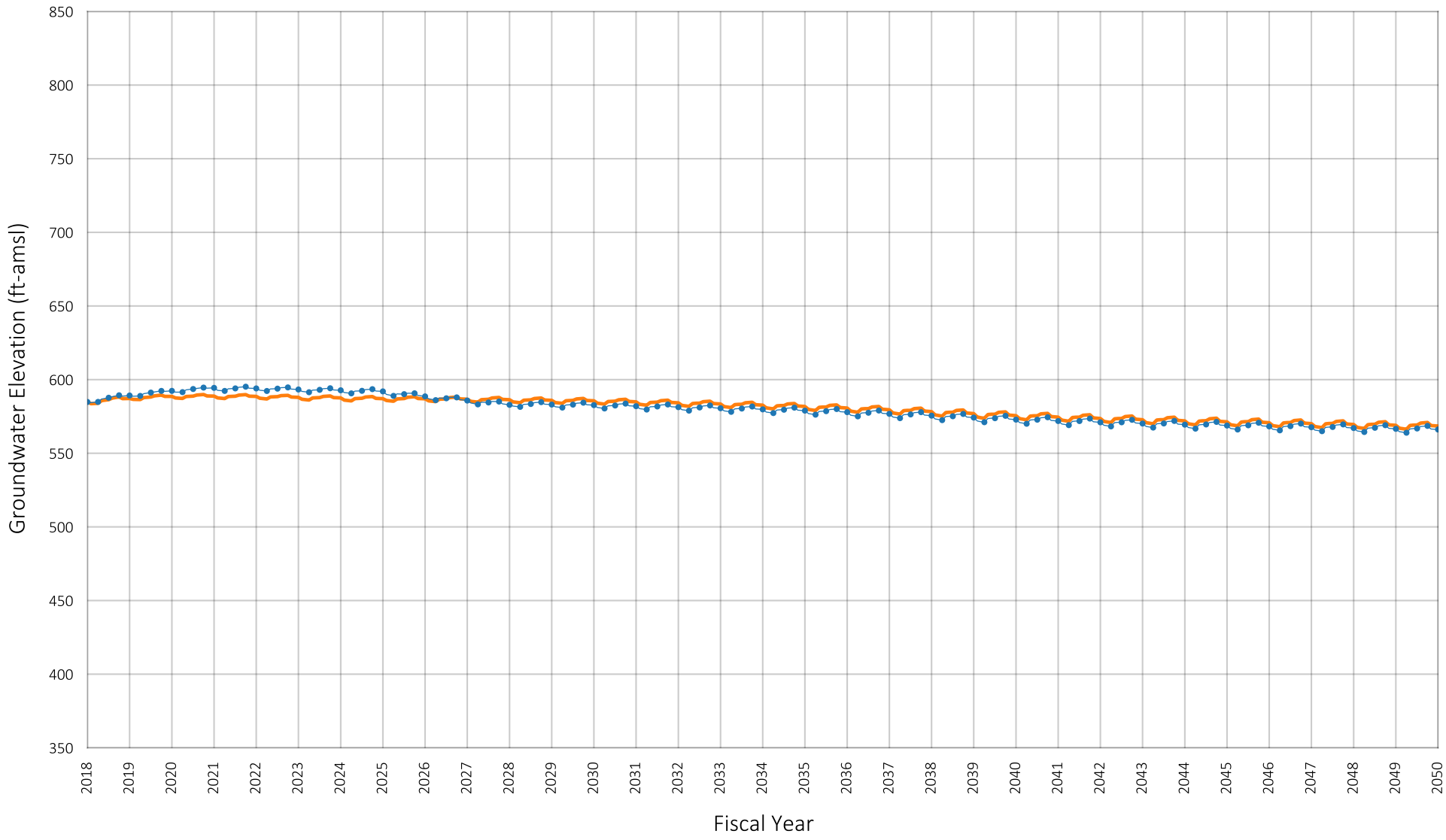
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 109
Owner: City of Ontario
Well Name: 109

Figure A-111



Location of Well in Chino Basin

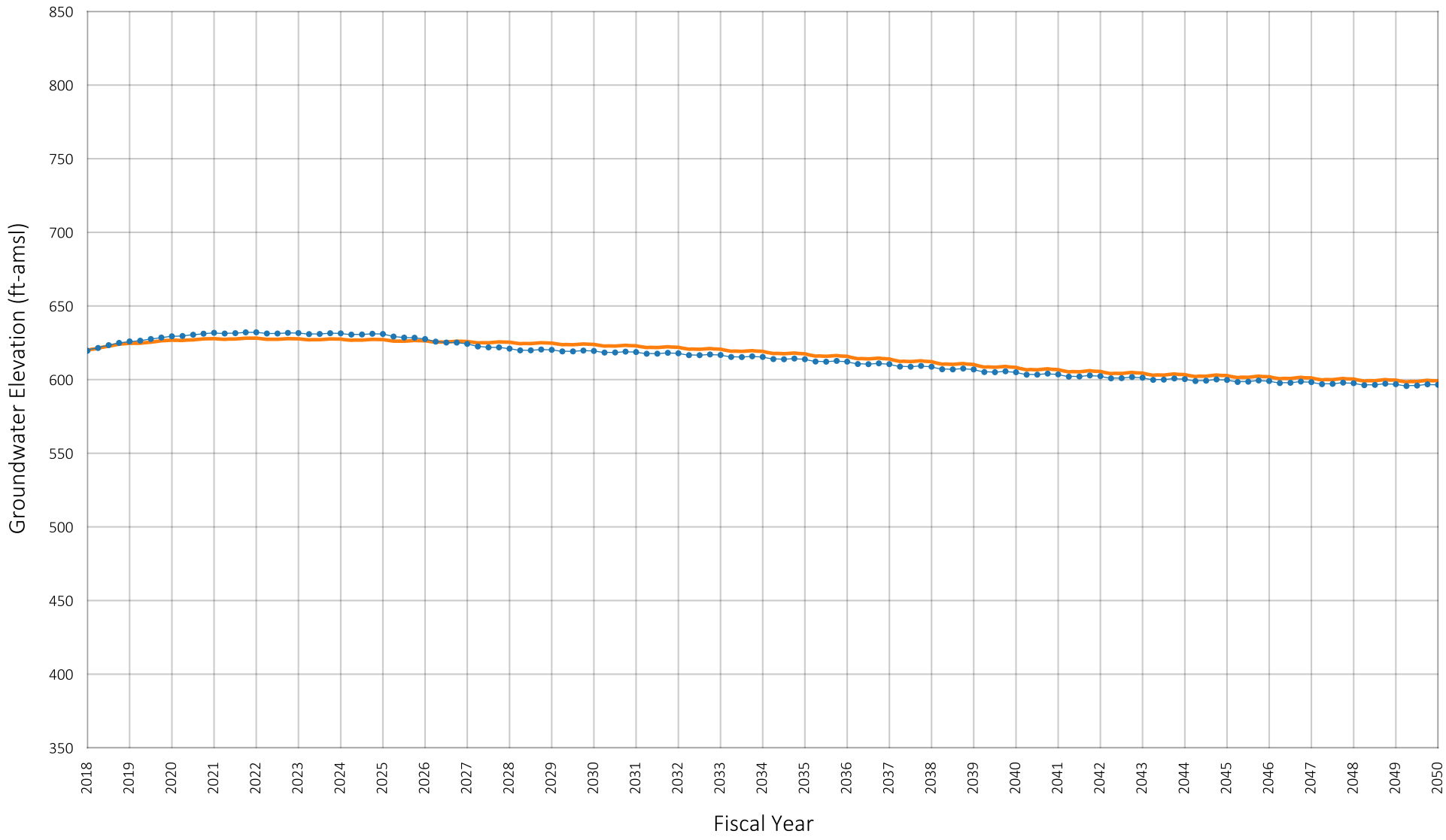
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 111
Owner: City of Ontario
Well Name: 111

Figure A-112



Location of Well in Chino Basin

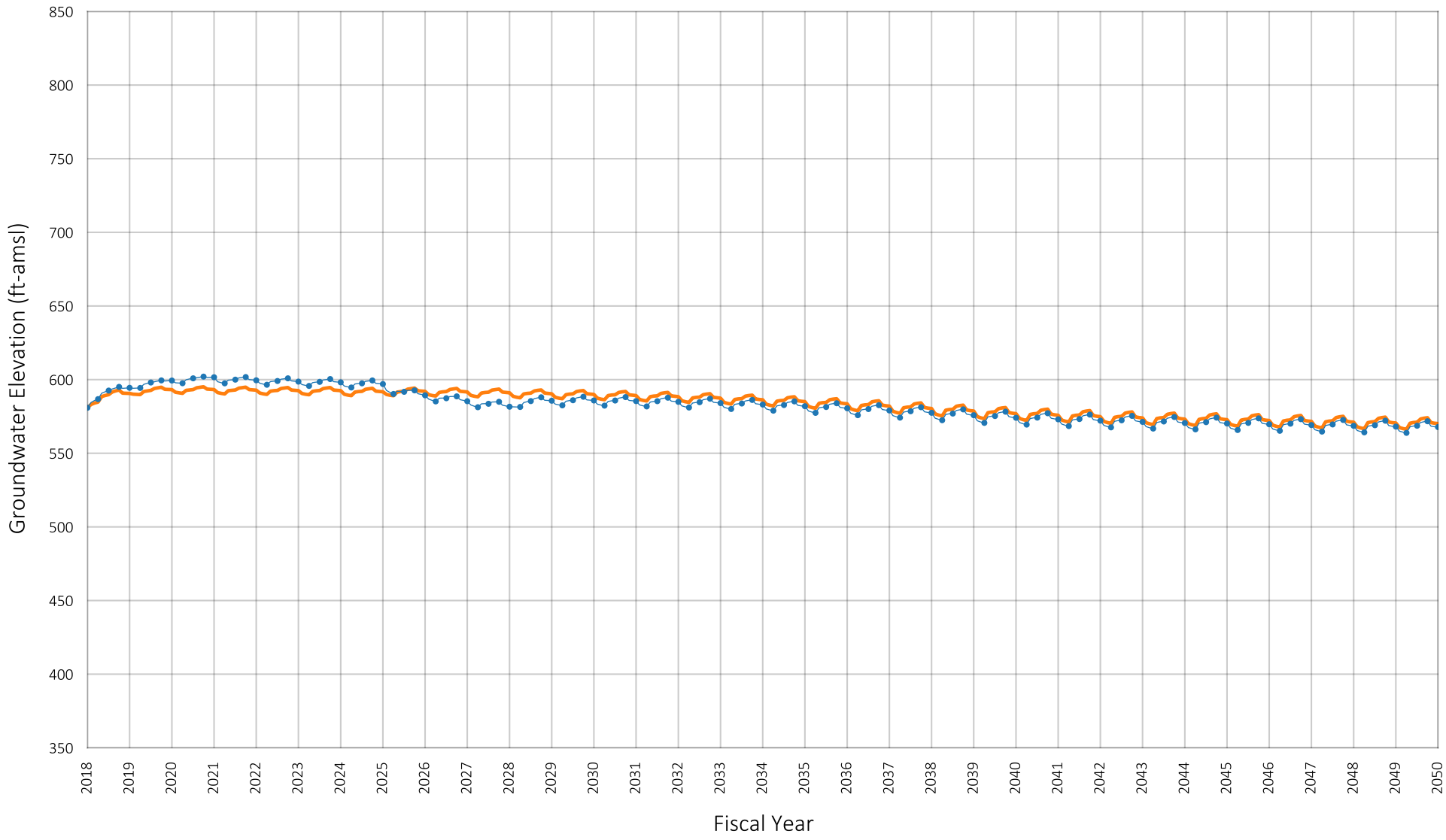
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 119
Owner: City of Ontario
Well Name: 119

Figure A-113



Location of Well in Chino Basin

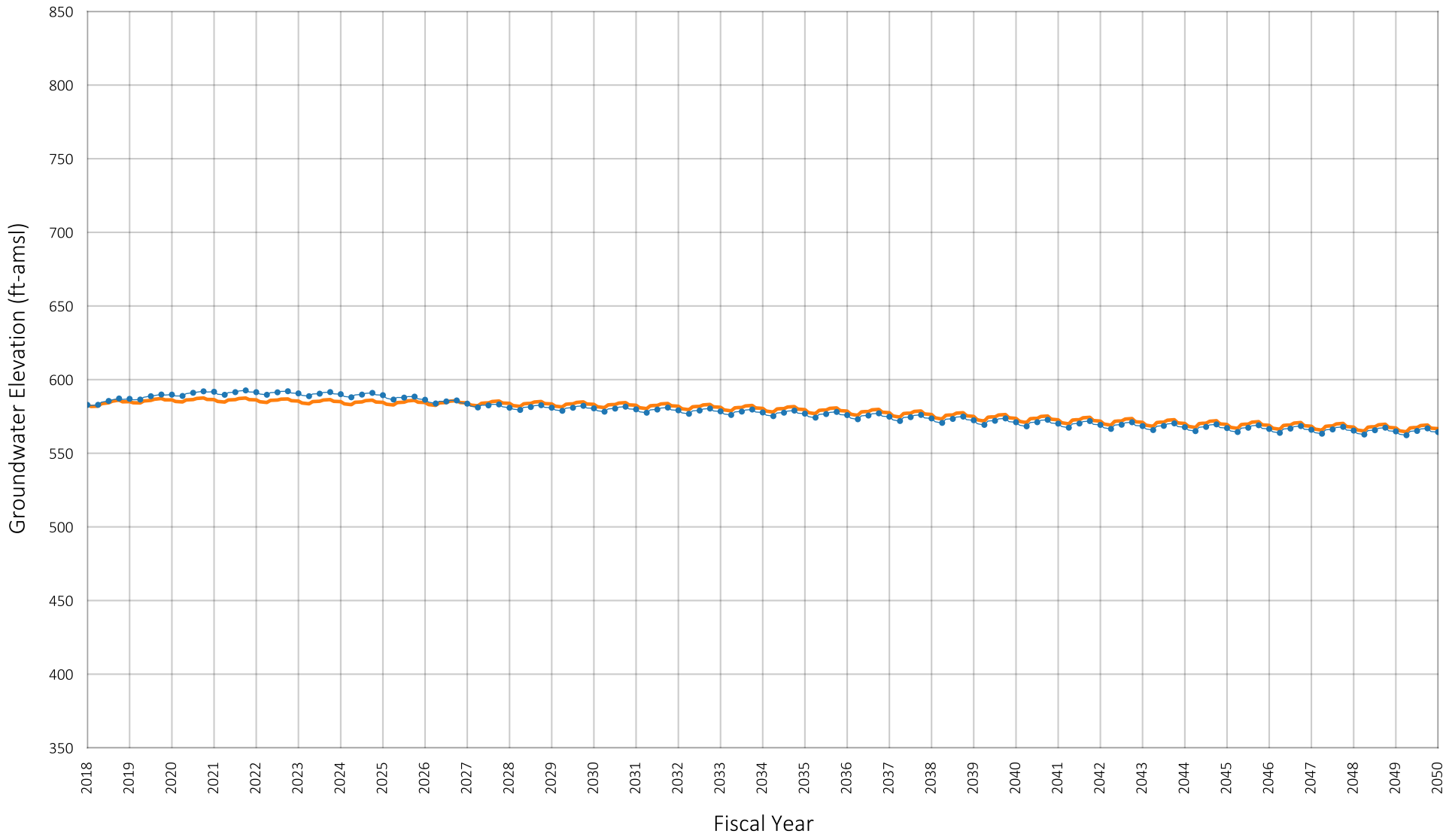
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 115
Owner: City of Ontario
Well Name: 115

Figure A-114



Location of Well in Chino Basin

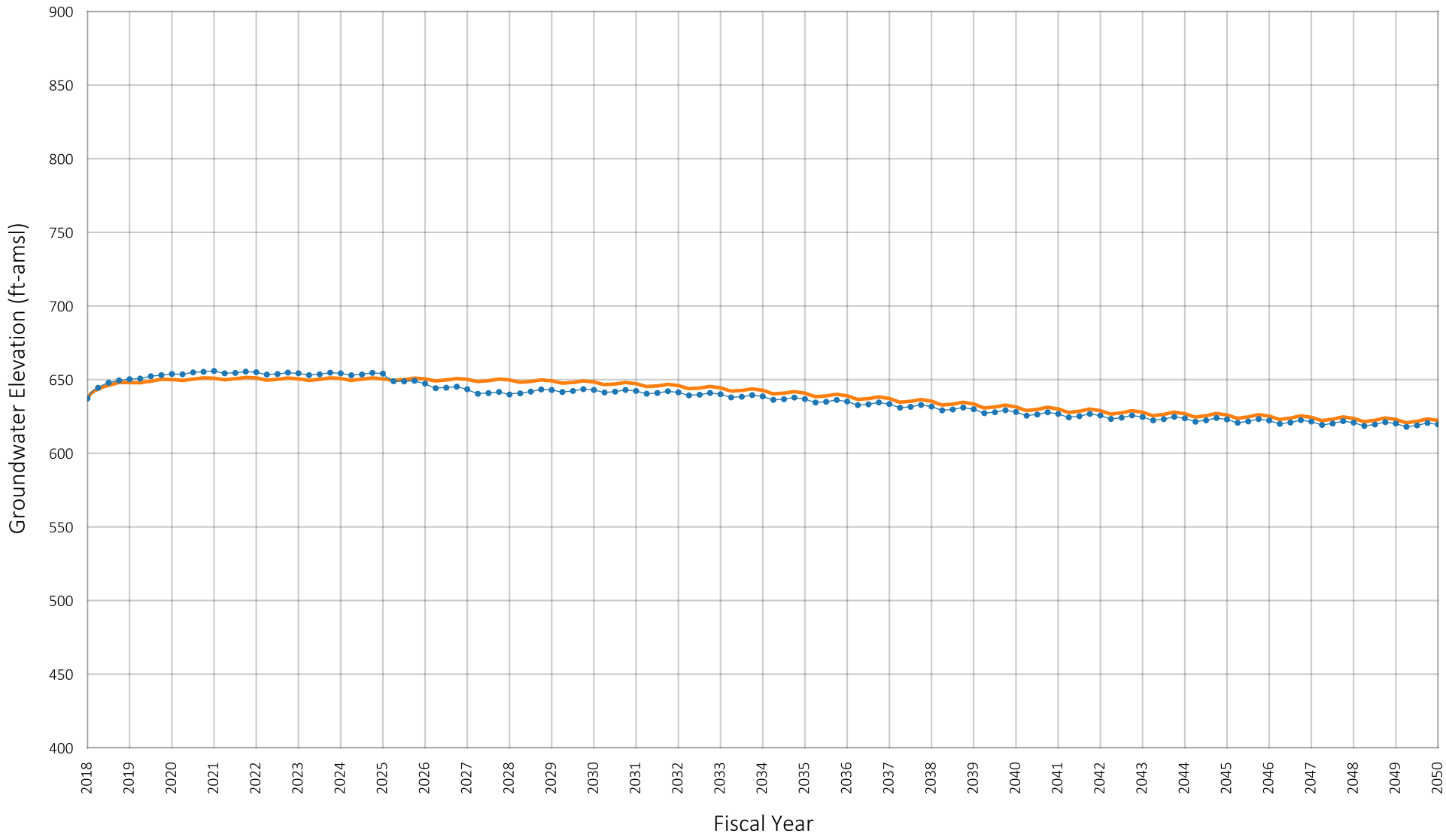
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 120
Owner: City of Ontario
Well Name: 120

Figure A-115



Location of Well in Chino Basin

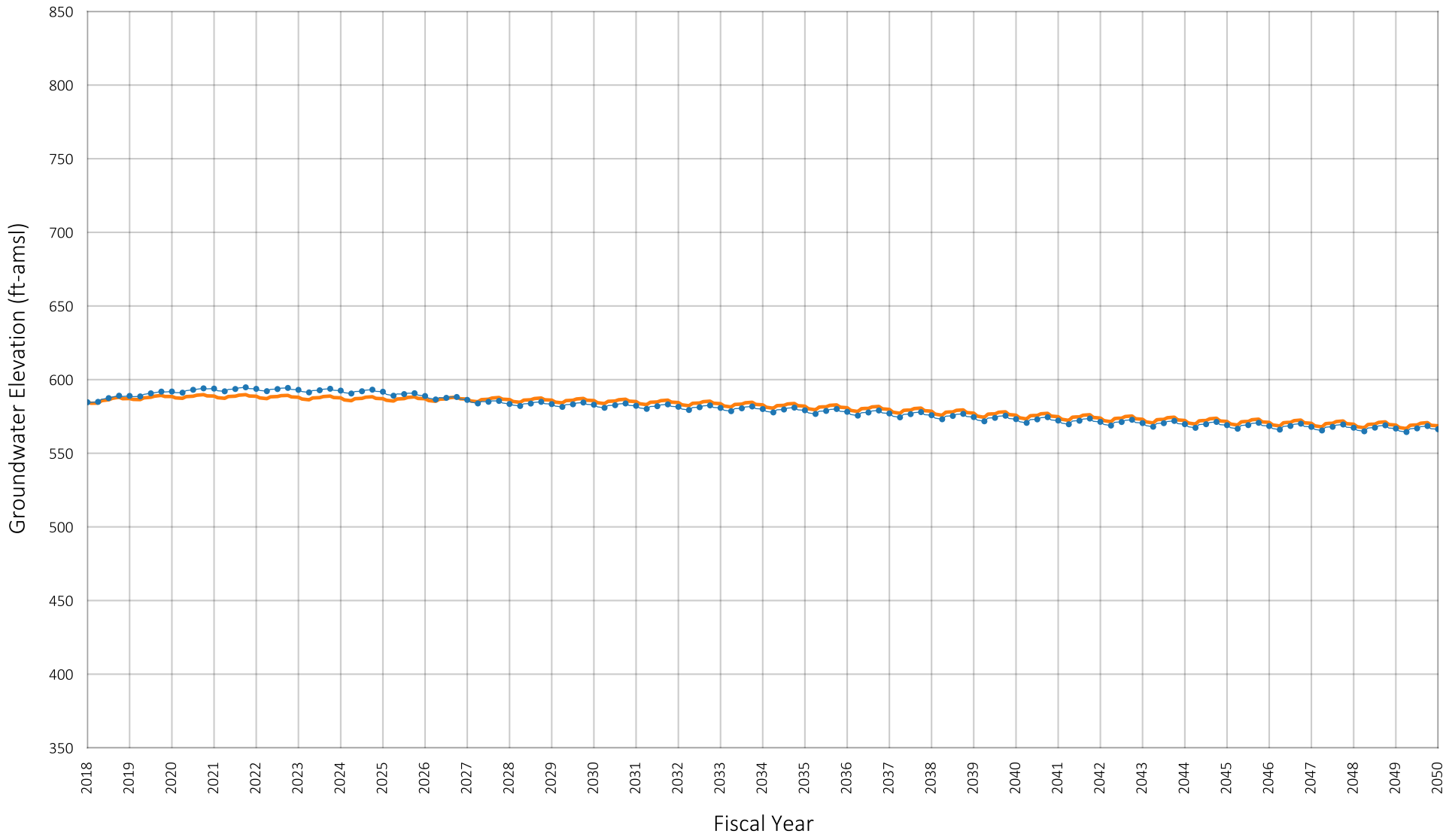
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 126
Owner: City of Ontario
Well Name: 126

Figure A-116



Location of Well in Chino Basin

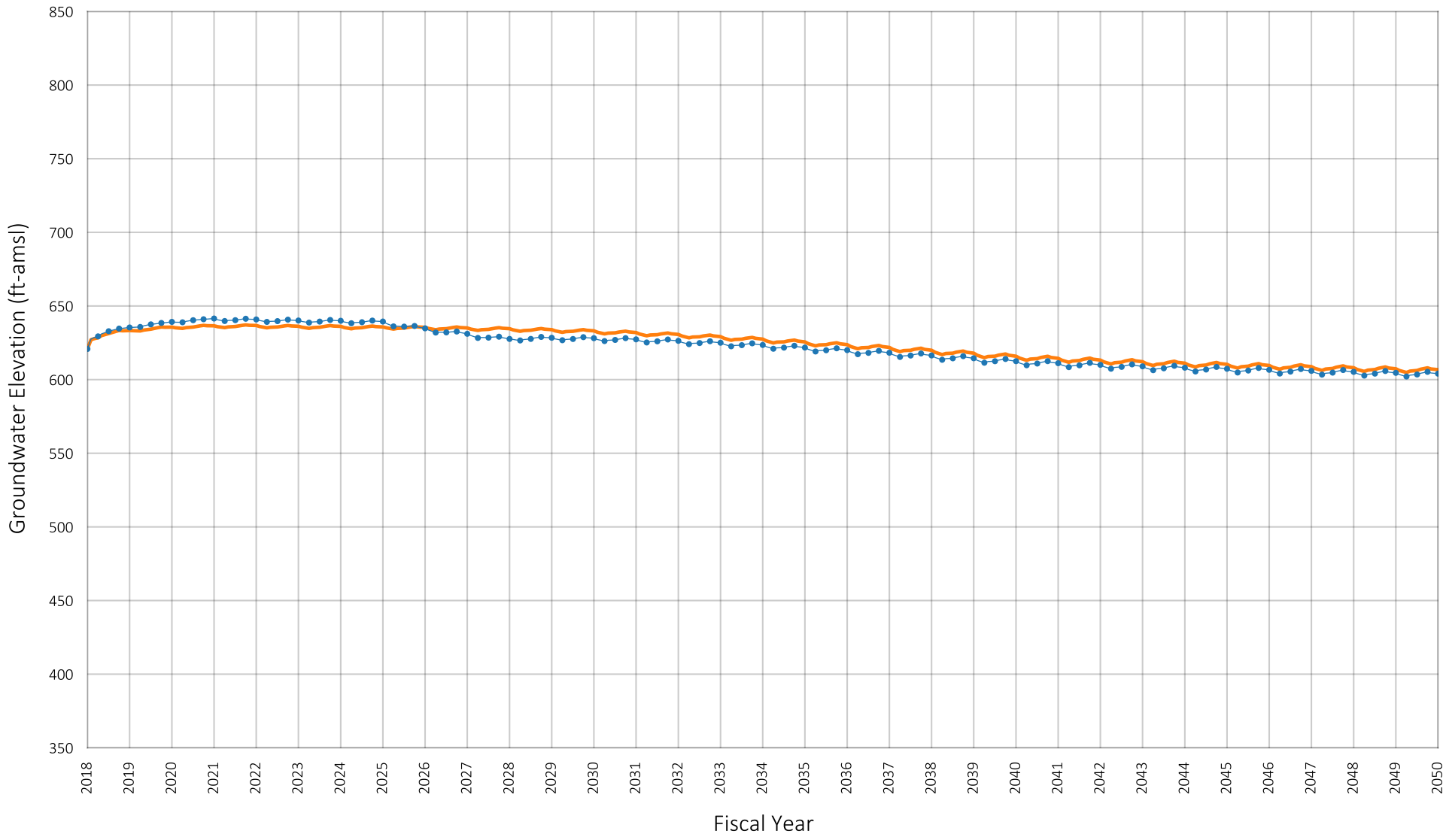
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 134
Owner: City of Ontario
Well Name: 134

Figure A-117



Location of Well in Chino Basin

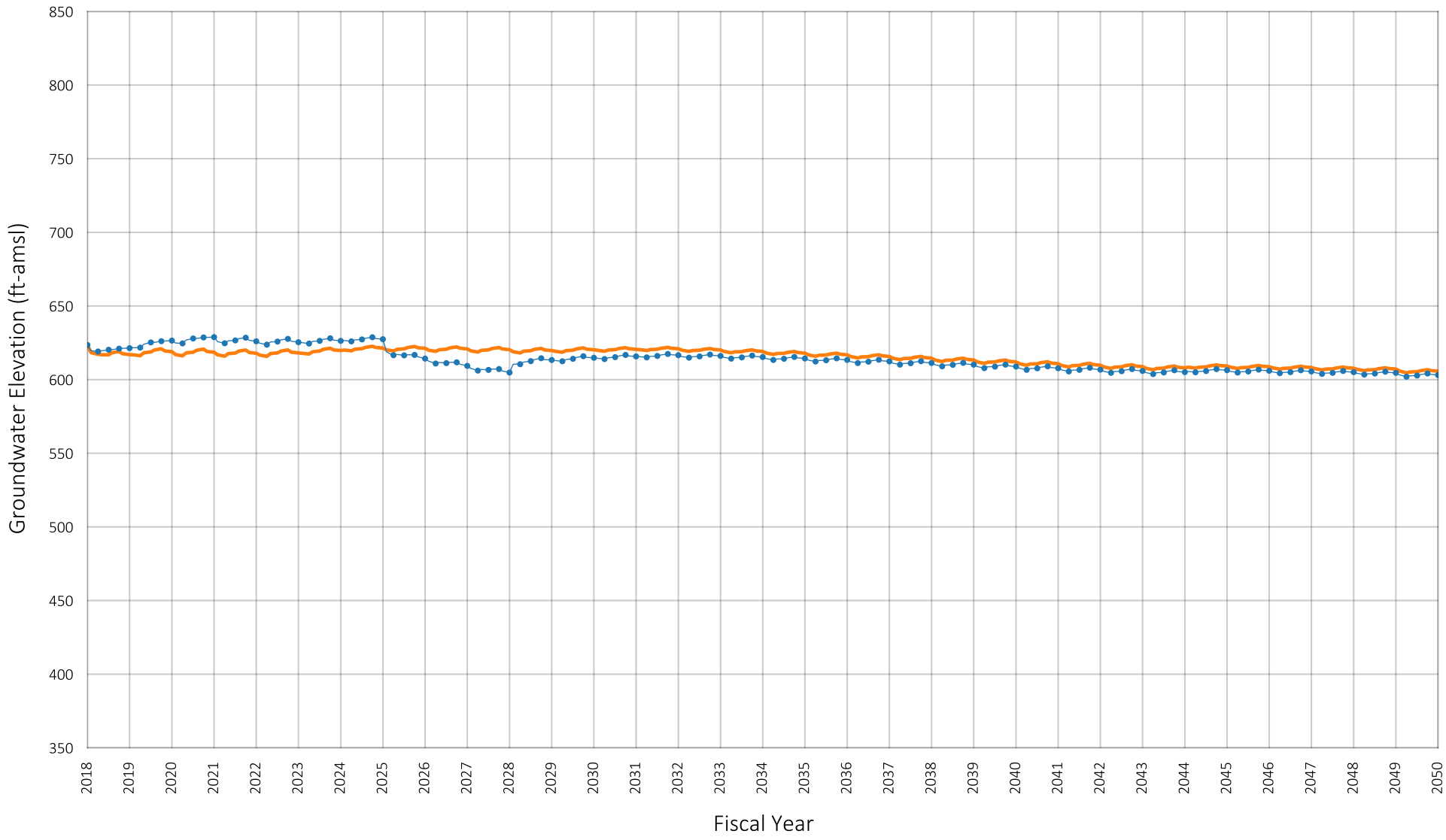
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 136
Owner: City of Ontario
Well Name: 136

Figure A-118



Location of Well in Chino Basin

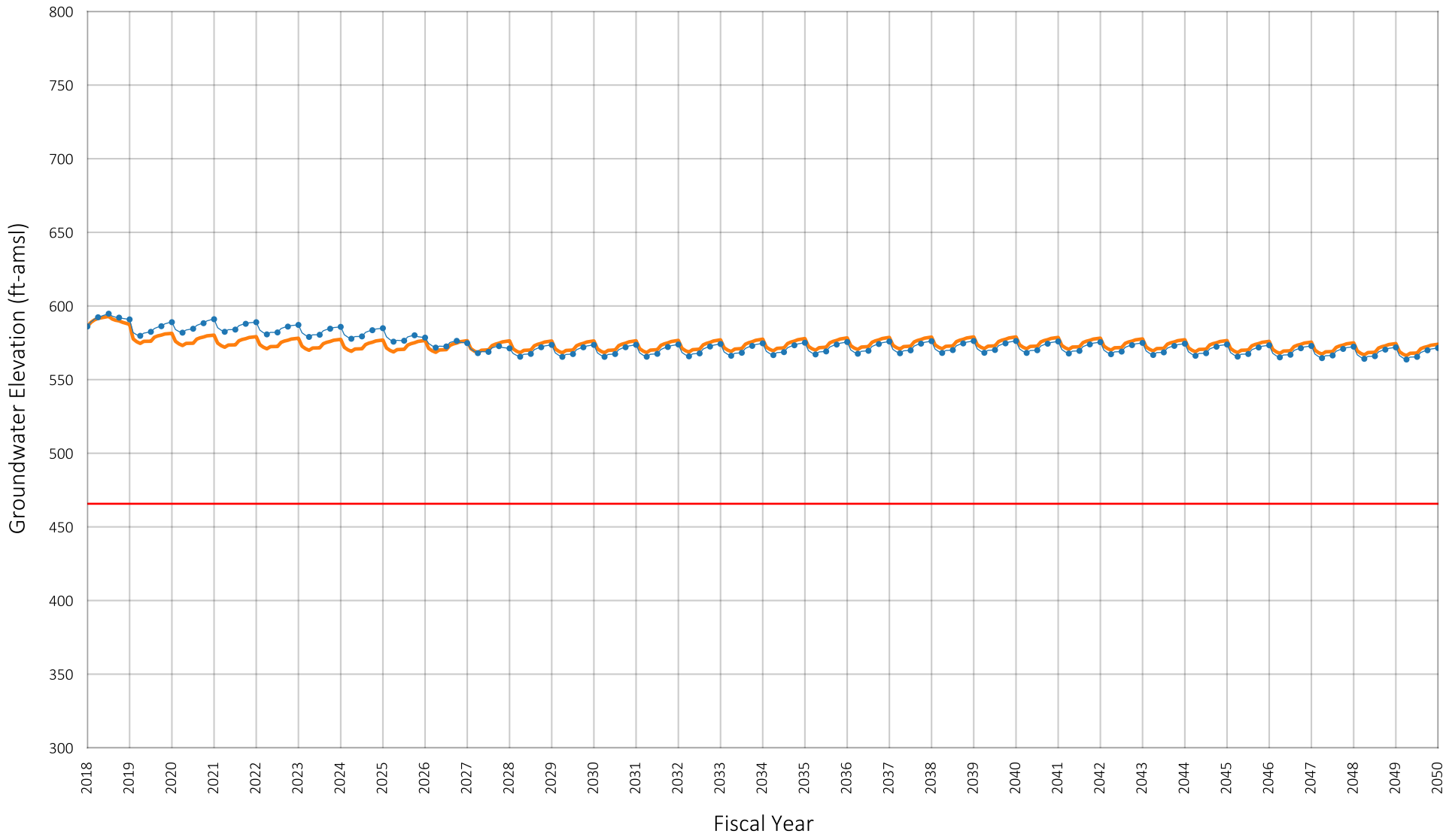
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 138
Owner: City of Ontario
Well Name: 138

Figure A-119



Location of Well in Chino Basin

SYR1

LSLS

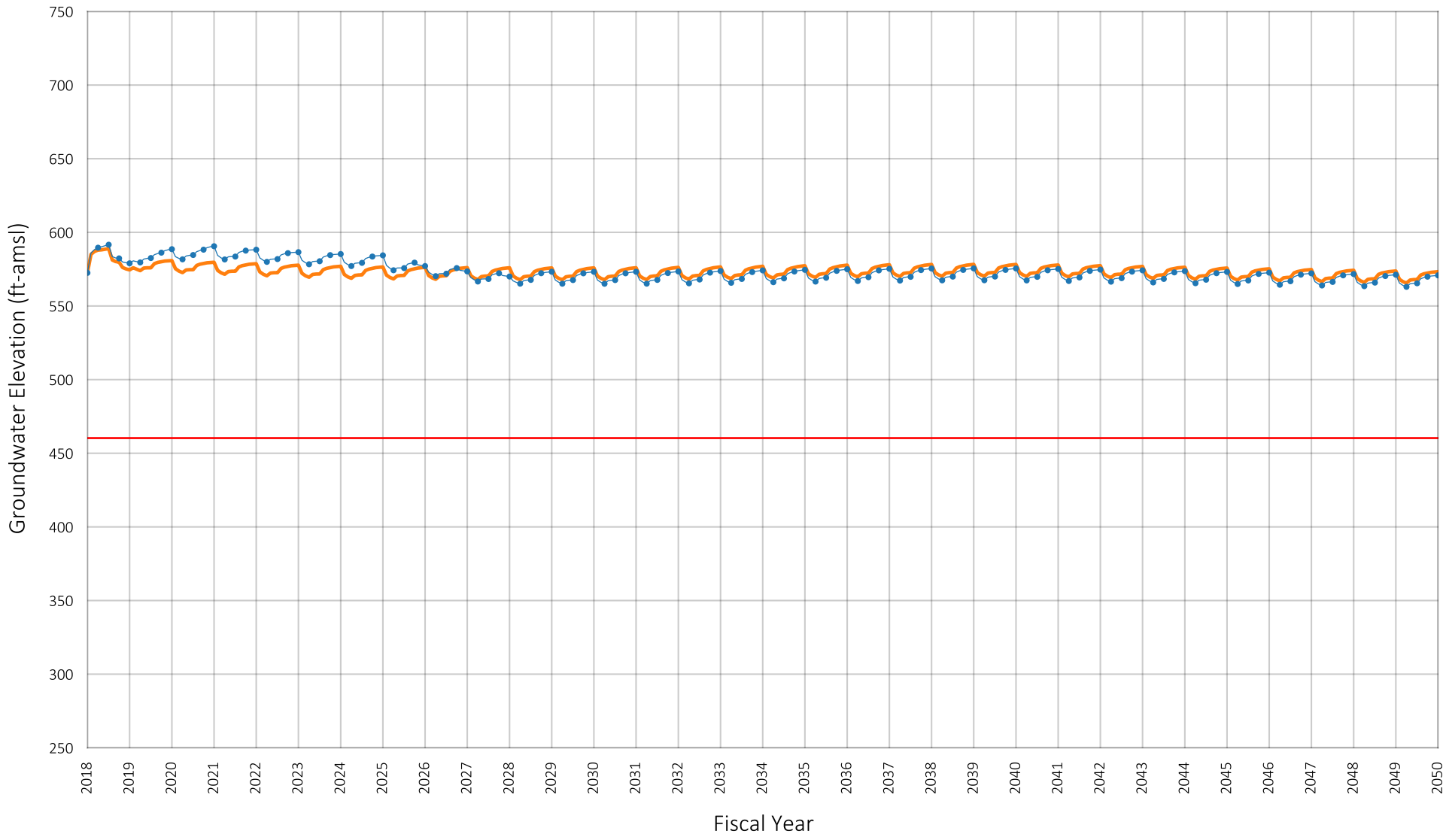
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002653
Owner: City of Pomona
Well Name: 2

Figure A-120



Location of Well in Chino Basin

SYR1

LSLS

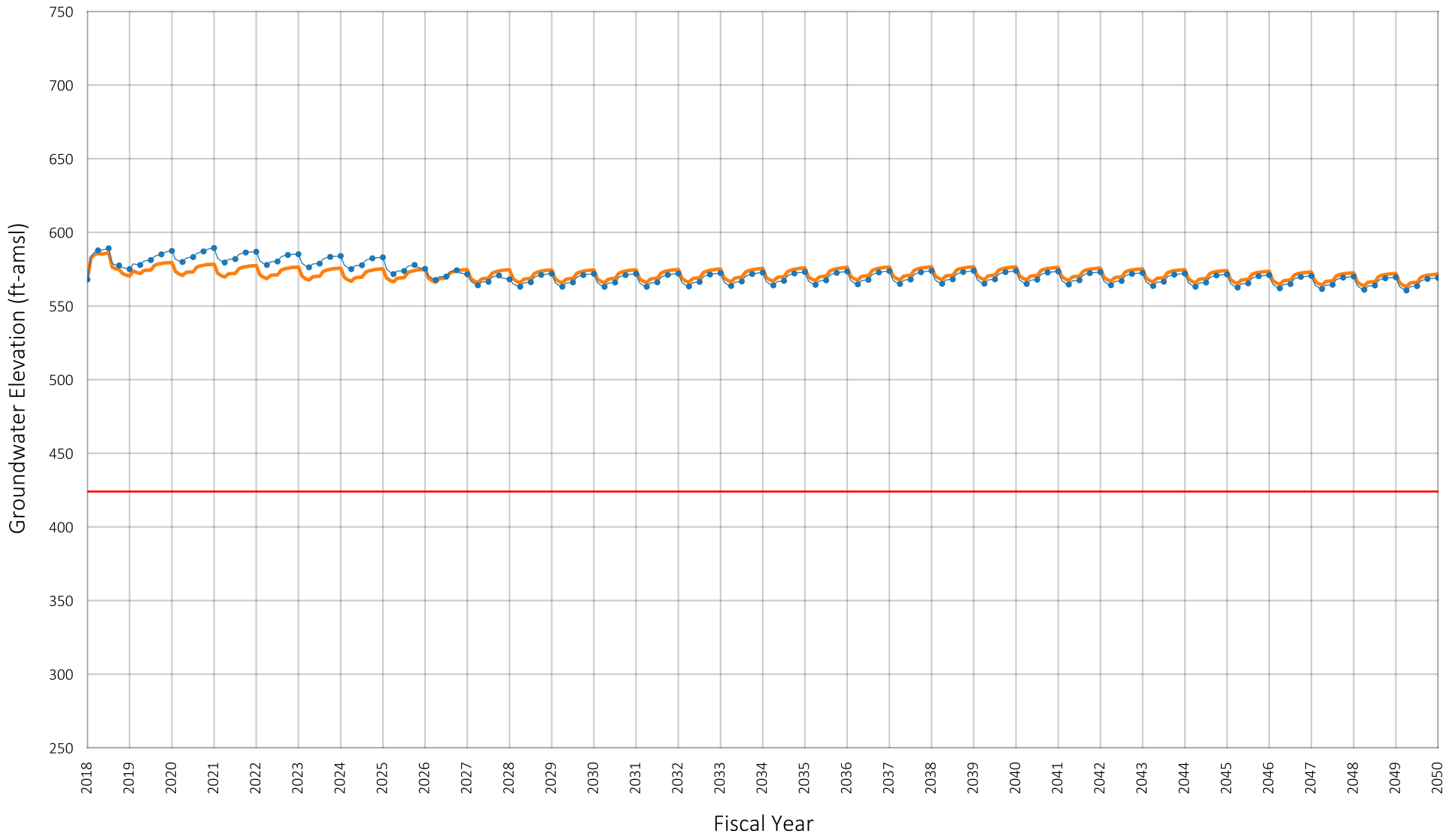
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1205314
Owner: City of Pomona
Well Name: 5B

Figure A-121



Location of Well in Chino Basin

SYR1

LSLS

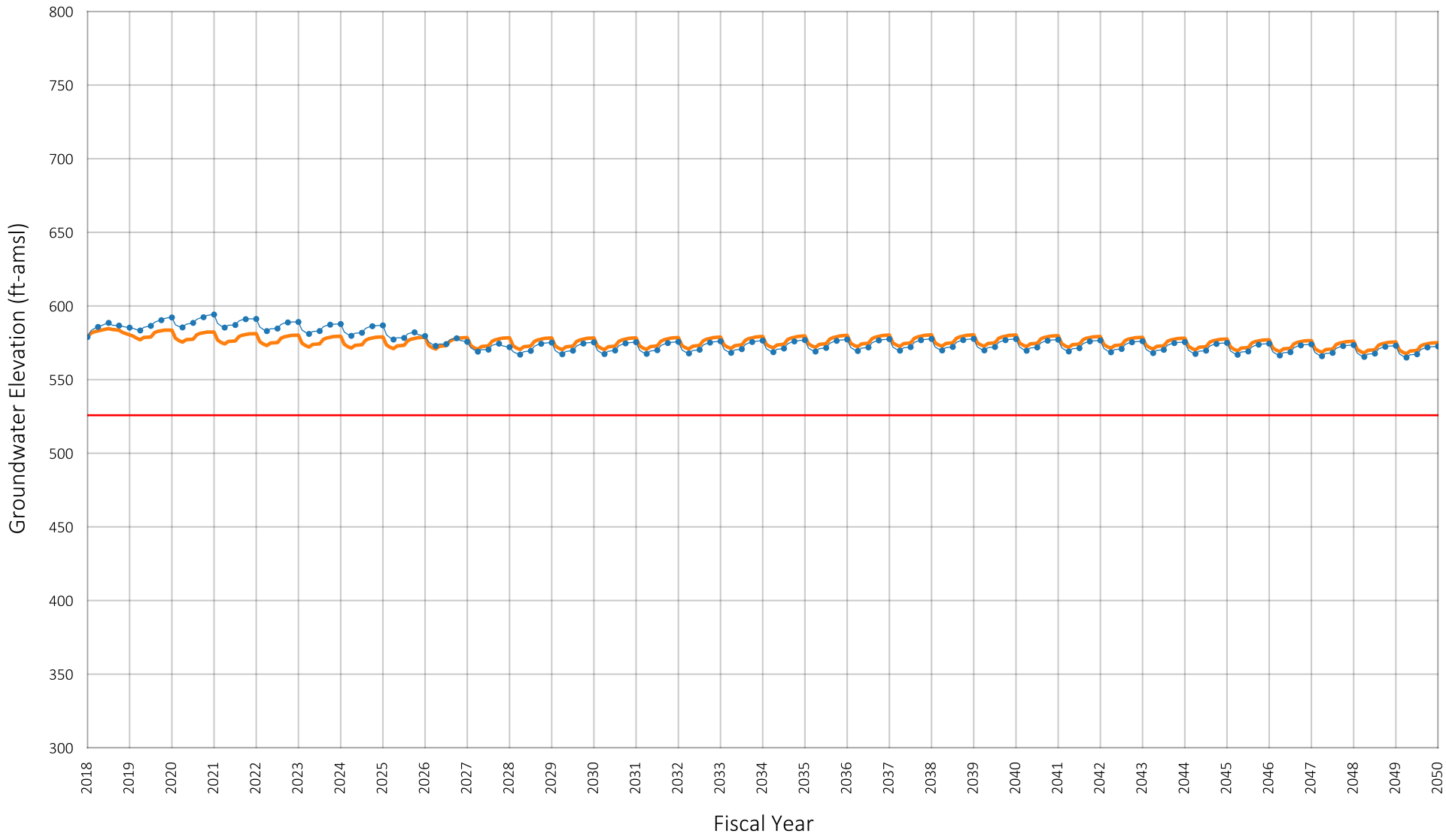
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002650
Owner: City of Pomona
Well Name: 6

Figure A-122



Location of Well in Chino Basin

SYR1

LSLS

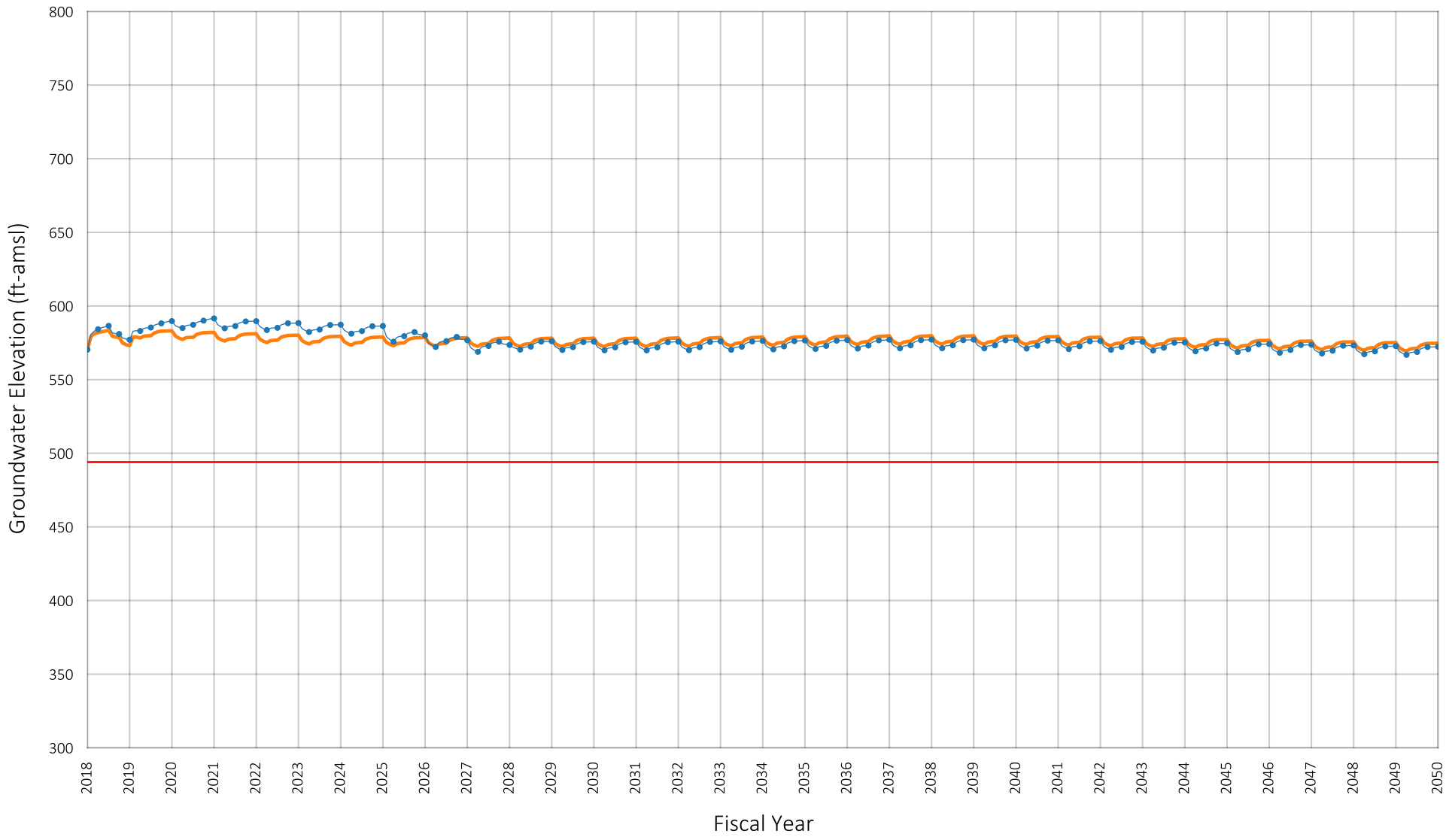
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002656
Owner: City of Pomona
Well Name: 10

Figure A-123



Location of Well in Chino Basin

SYR1

LSLS

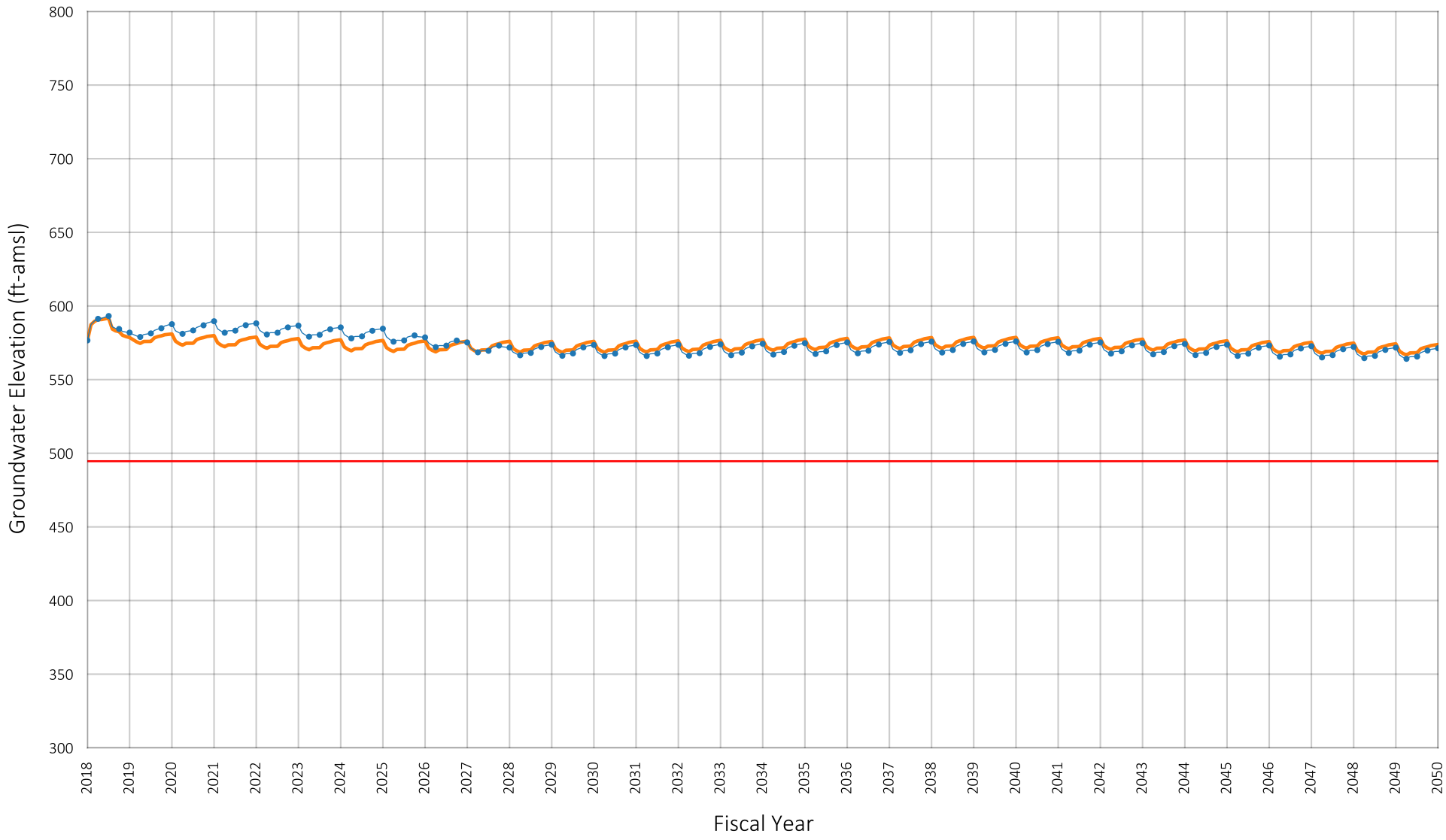
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002664
Owner: City of Pomona
Well Name: 15

Figure A-124



Location of Well in Chino Basin

SYR1

LSLS

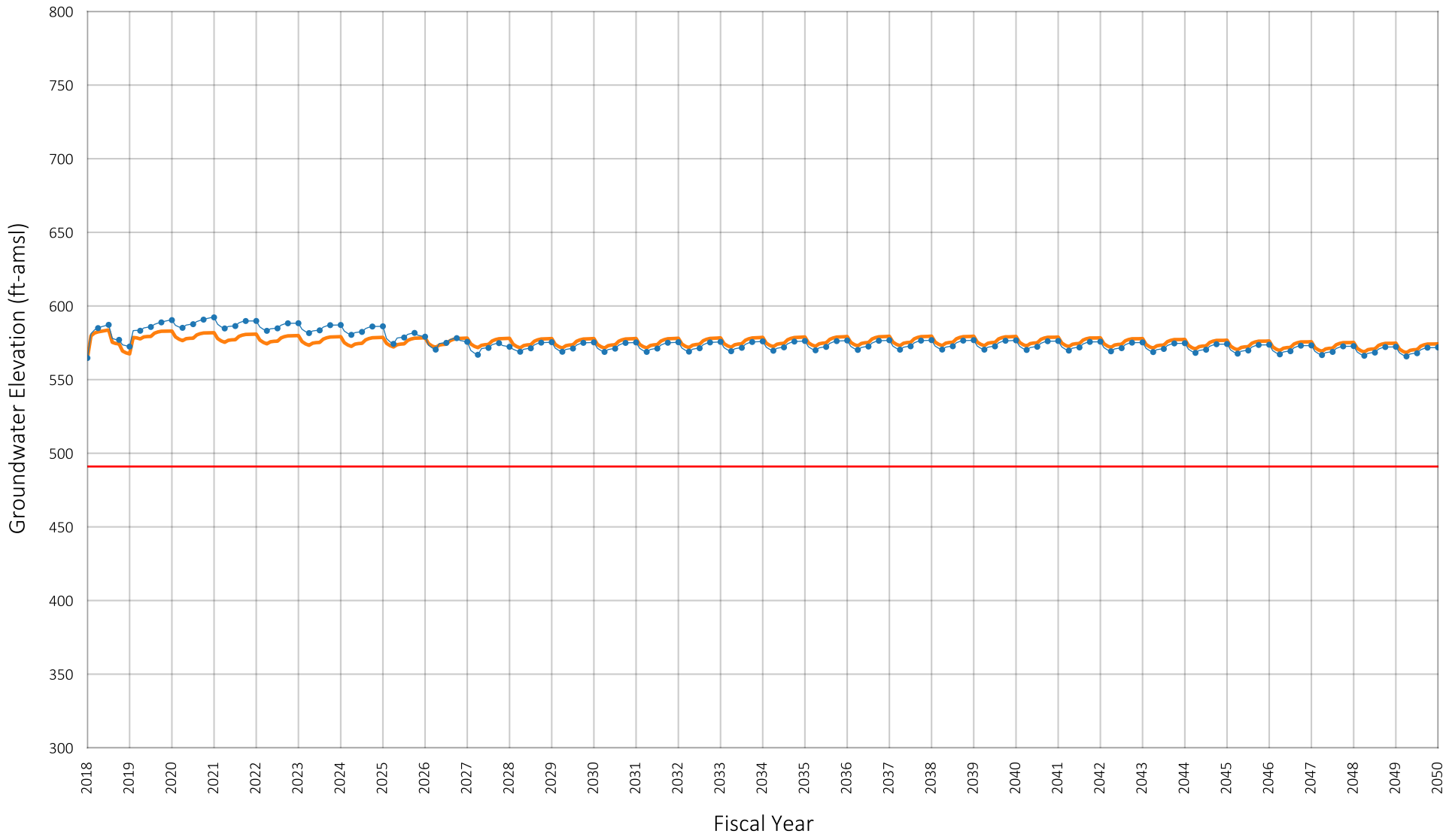
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002654
Owner: City of Pomona
Well Name: 16

Figure A-125



Location of Well in Chino Basin

SYR1

LSLS

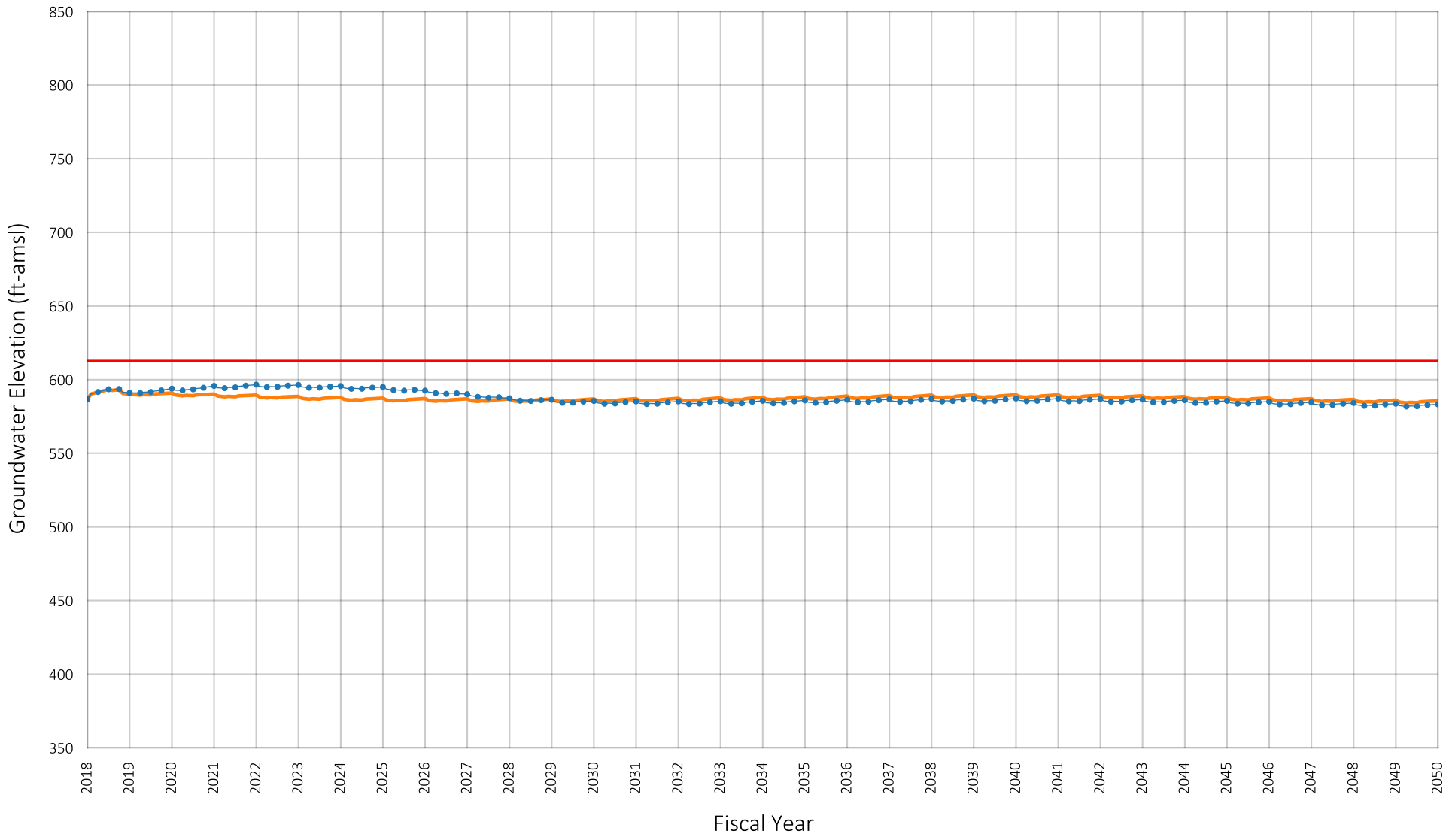
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002659
Owner: City of Pomona
Well Name: 17

Figure A-126



Location of Well in Chino Basin

SYR1

LSLS

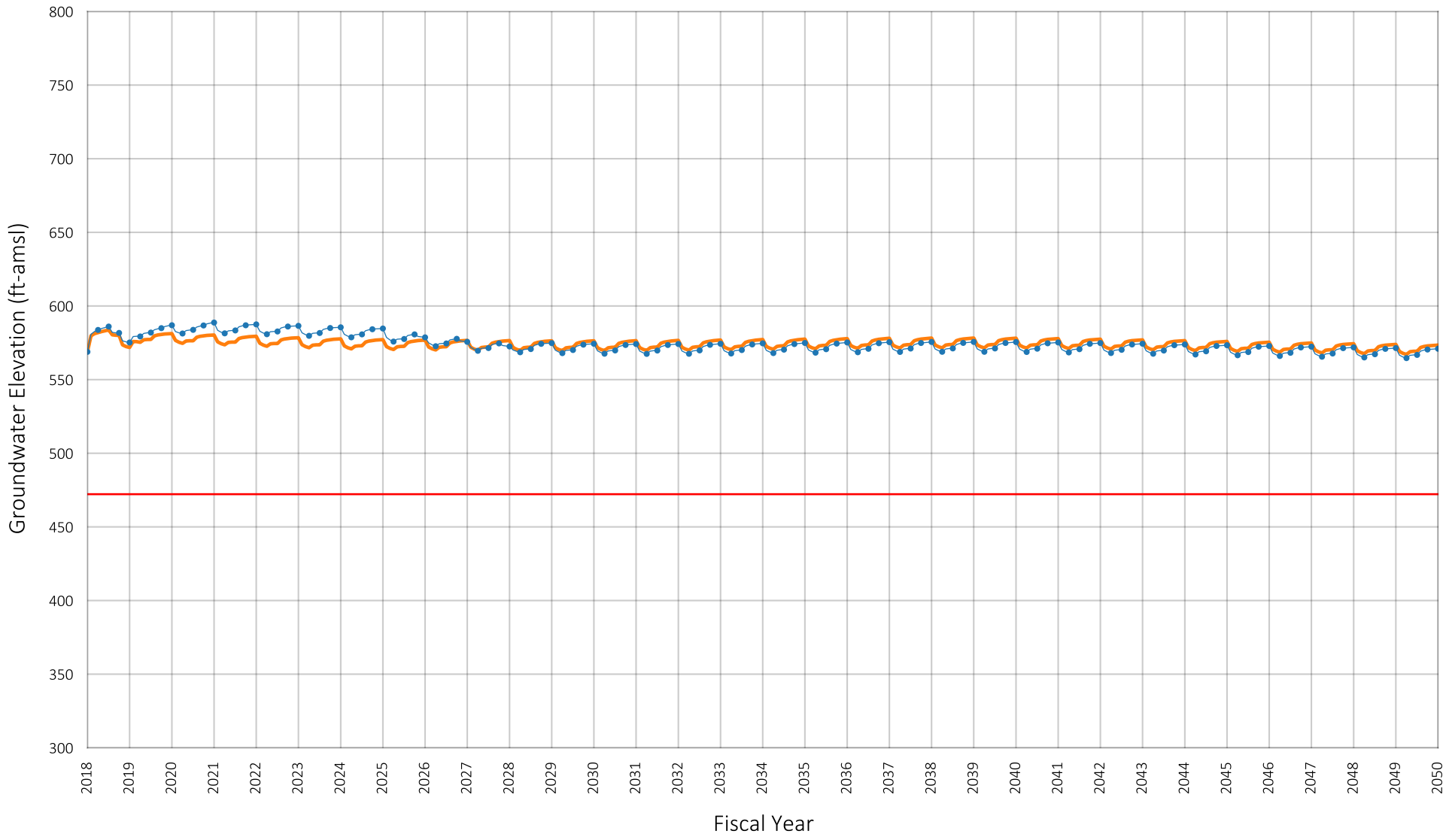
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002678
Owner: City of Pomona
Well Name: 21

Figure A-127



Location of Well in Chino Basin

SYR1

LSLS

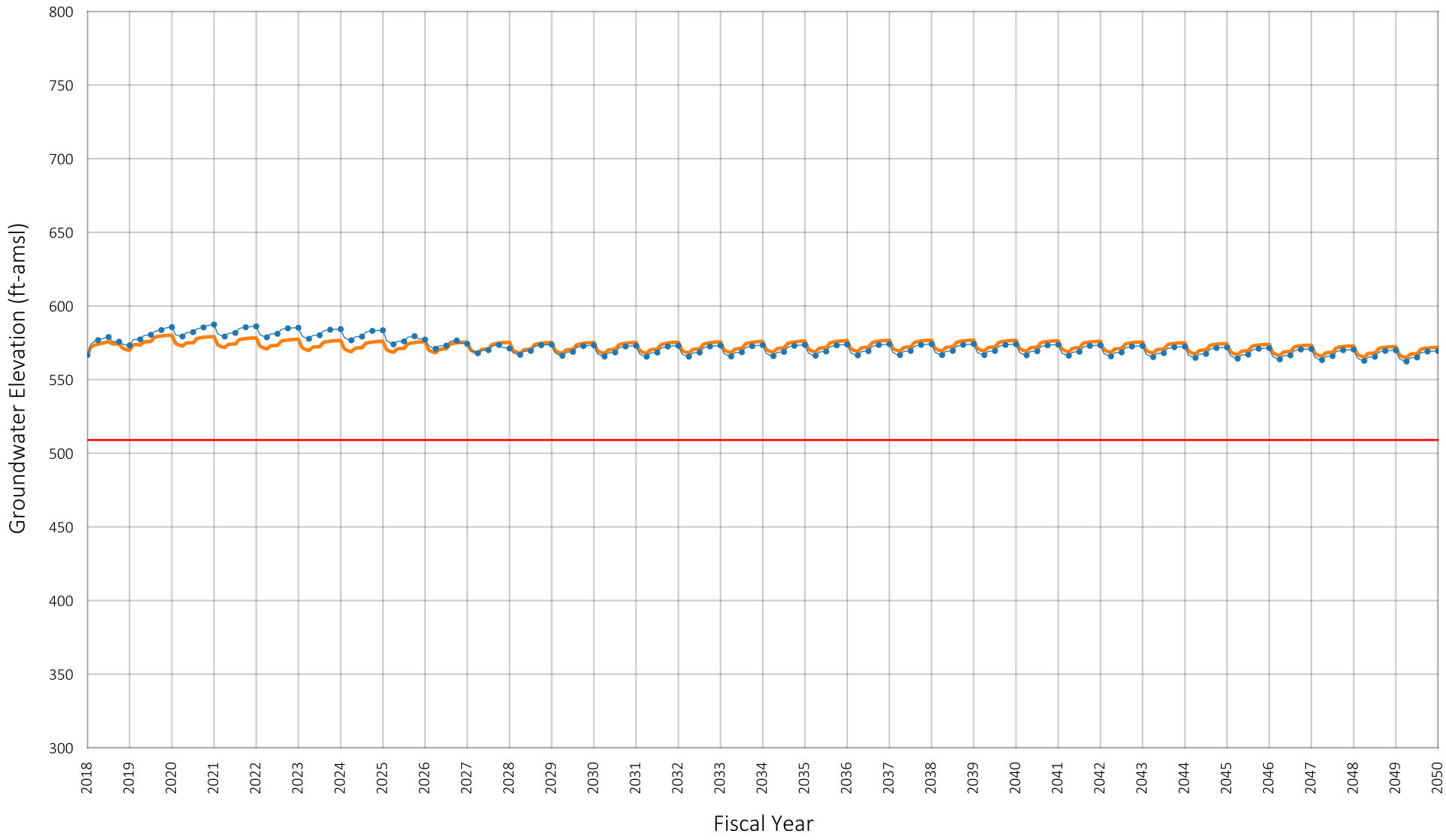
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002704
Owner: City of Pomona
Well Name: 23

Figure A-128



Location of Well in Chino Basin

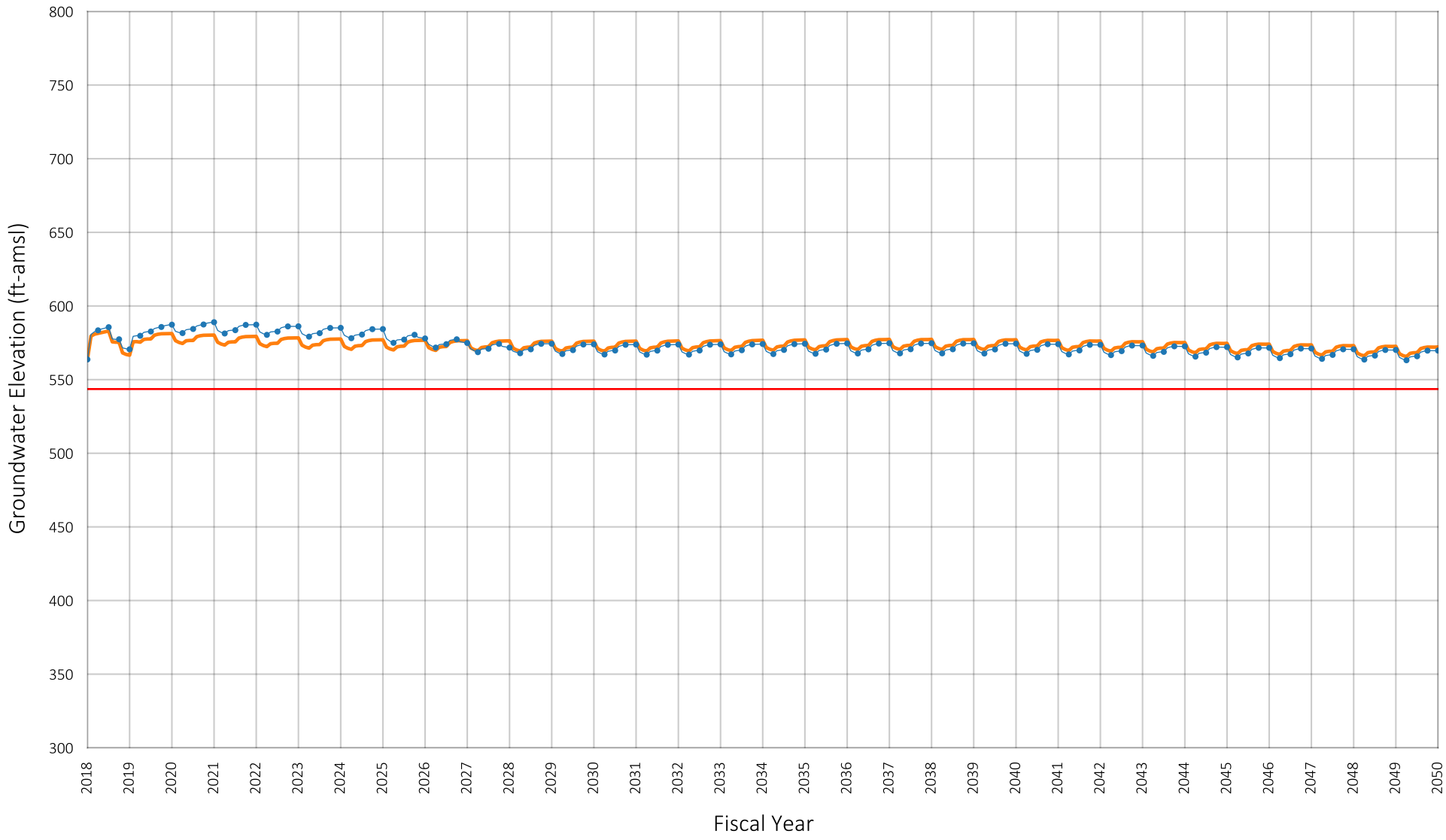
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002706
Owner: City of Pomona
Well Name: 25

Figure A-129



Location of Well in Chino Basin

SYR1

LSLS

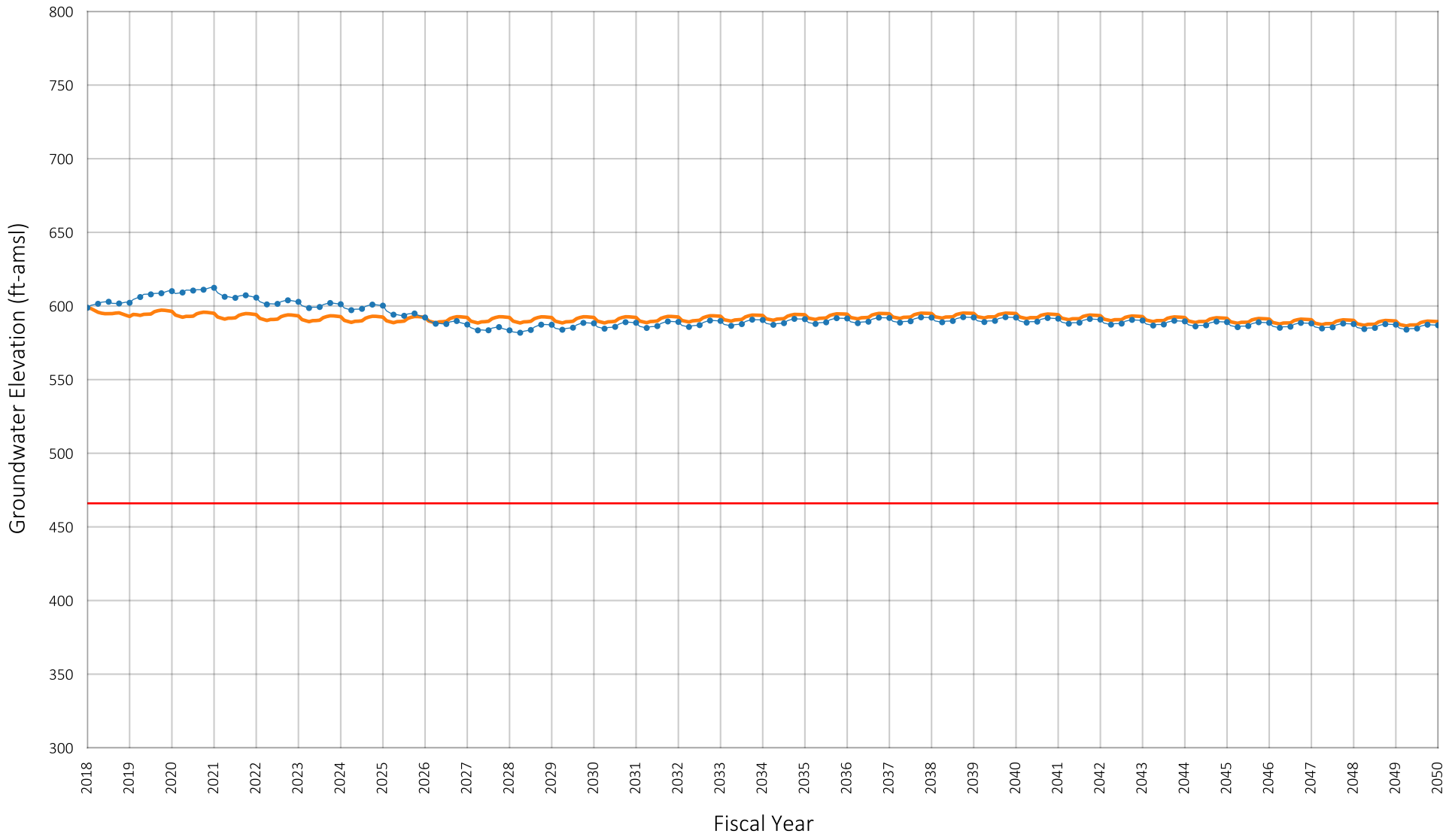
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002703
Owner: City of Pomona
Well Name: 26

Figure A-130



Location of Well in Chino Basin

SYR1

LSLS

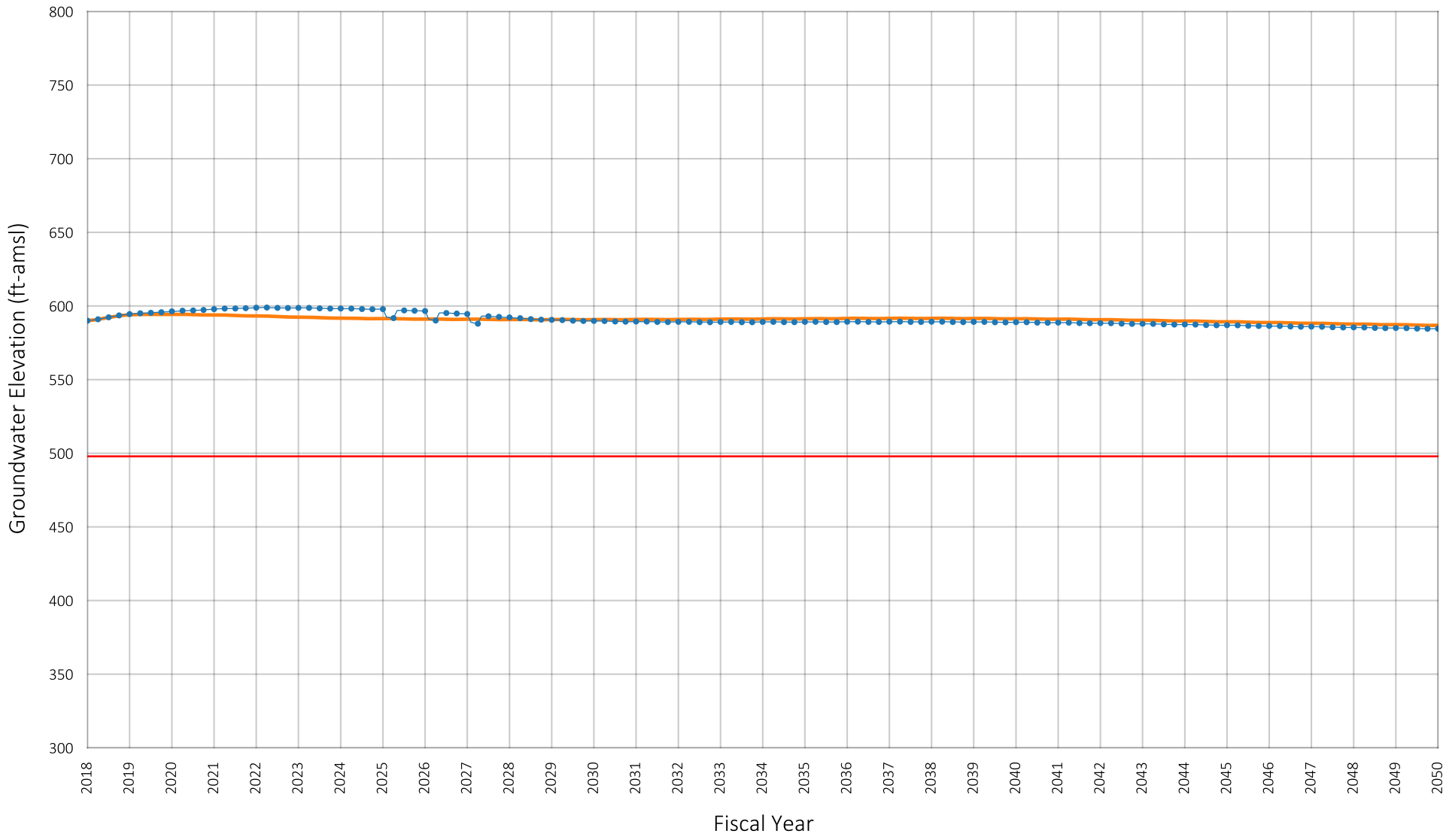
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1201236
Owner: City of Pomona
Well Name: 27

Figure A-131



Location of Well in Chino Basin

SYR1

LSLS

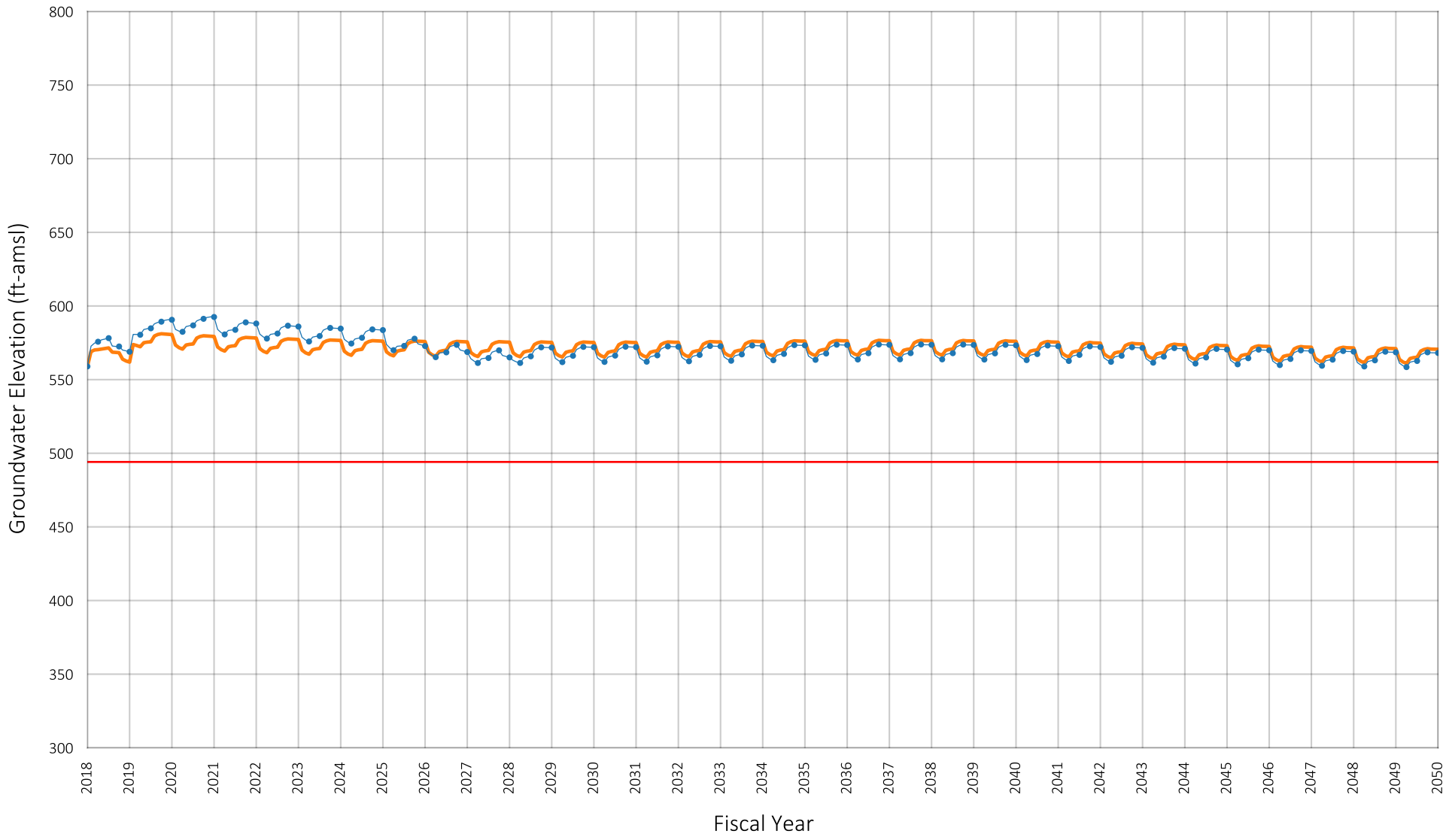
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1203062
Owner: City of Pomona
Well Name: 29

Figure A-132



Location of Well in Chino Basin

SYR1

LSLS

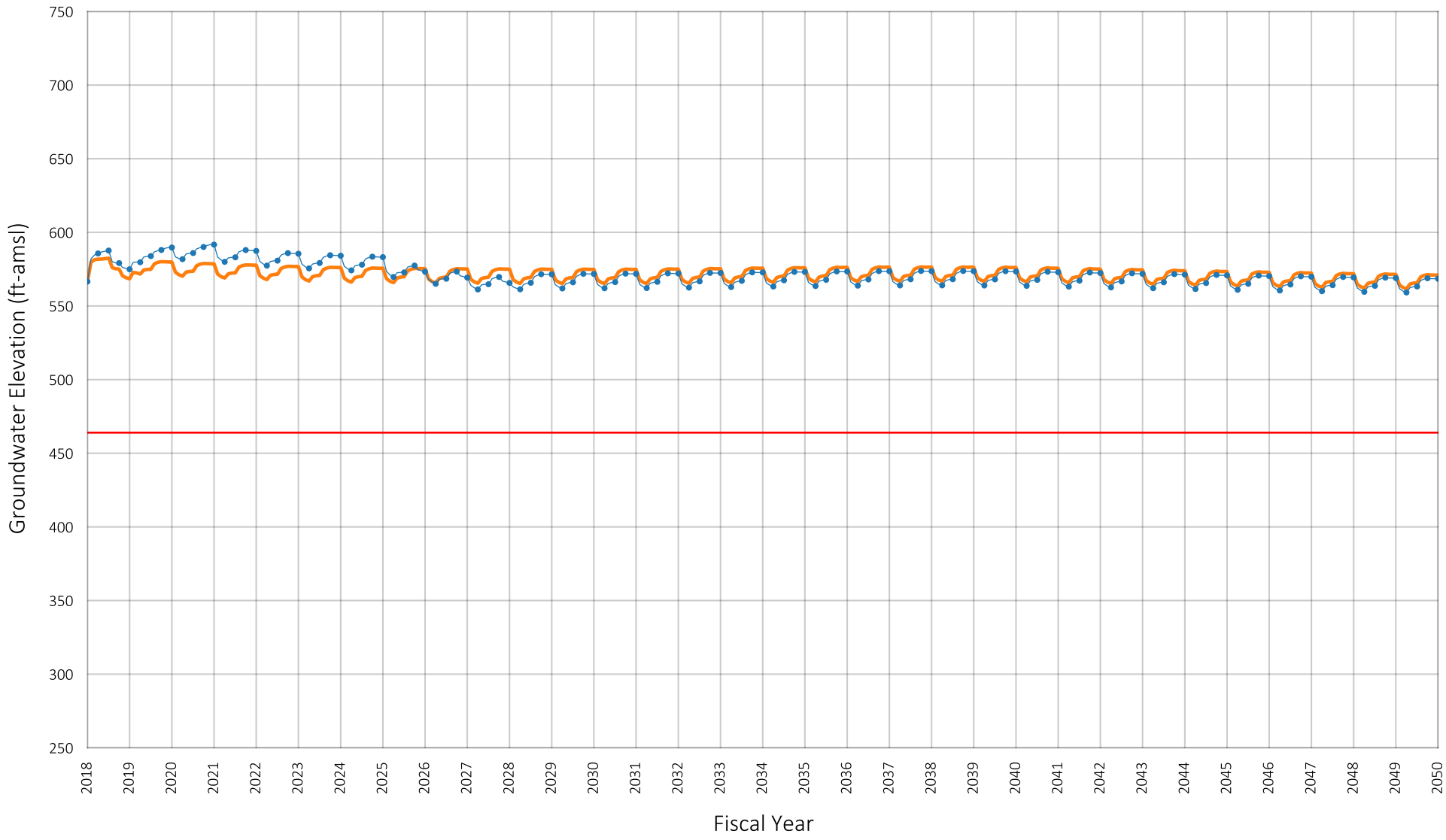
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1201247
Owner: City of Pomona
Well Name: 34

Figure A-133



Location of Well in Chino Basin

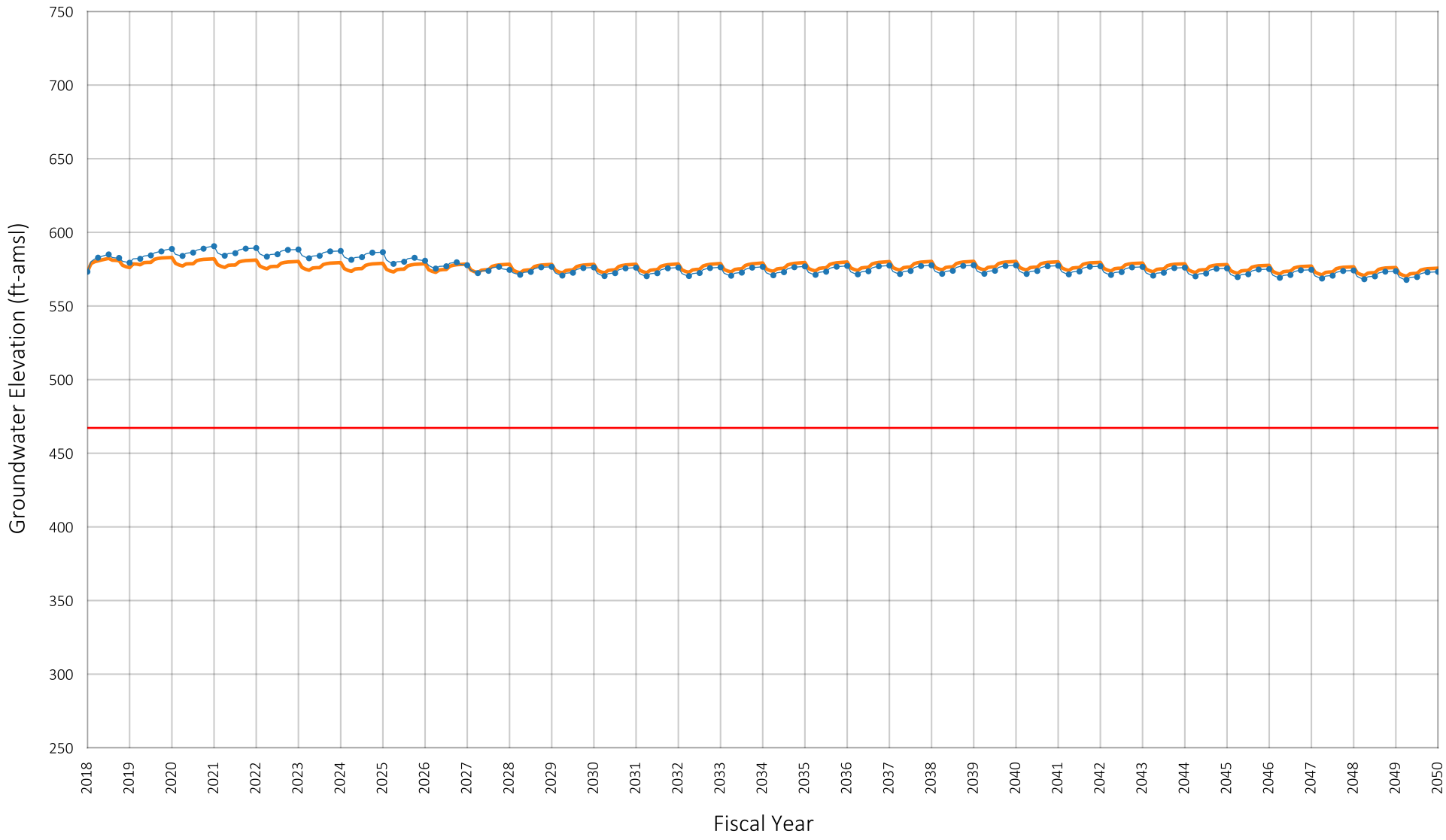
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1201246
Owner: City of Pomona
Well Name: 35

Figure A-134



Location of Well in Chino Basin

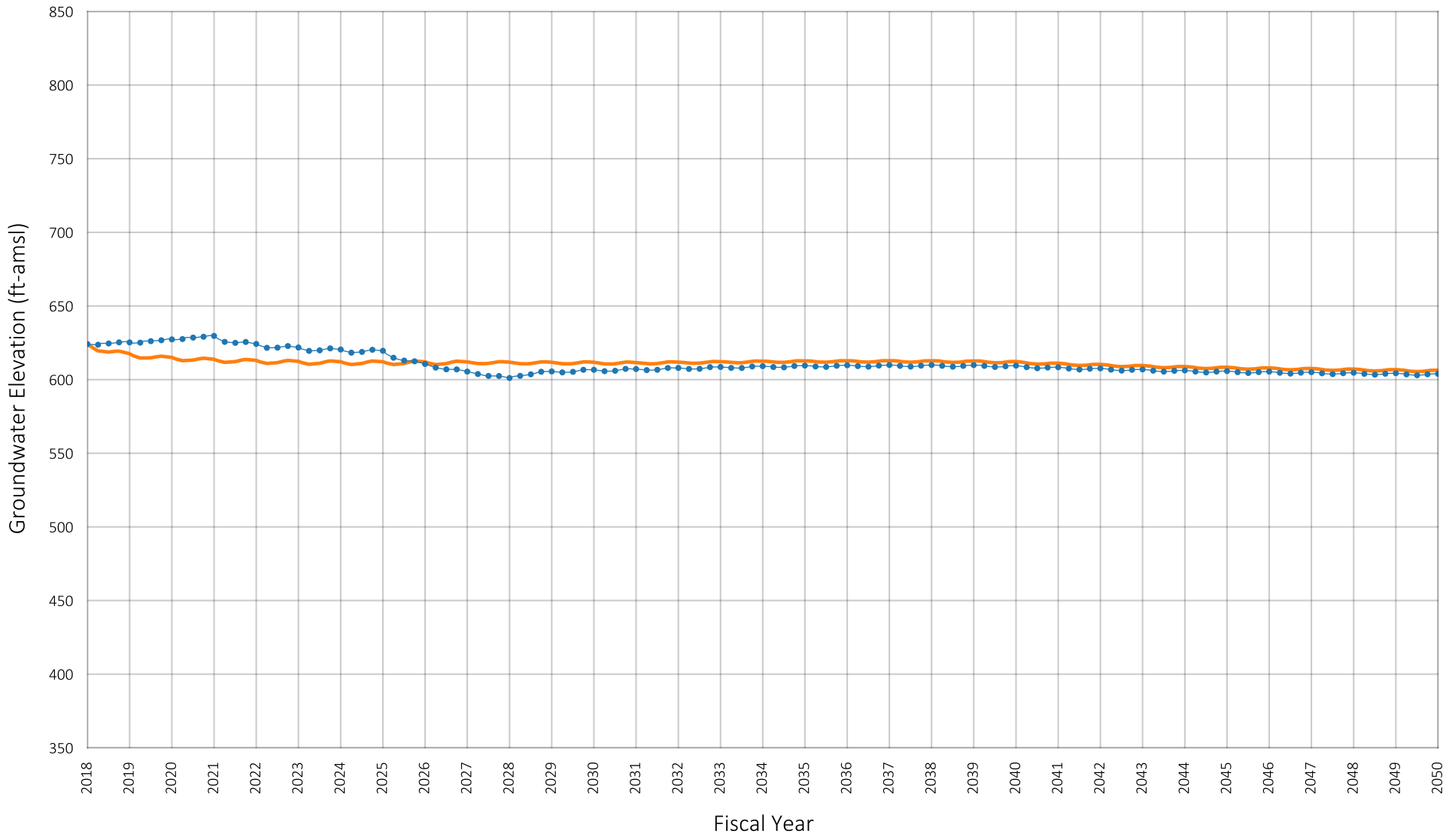
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1205309
Owner: City of Pomona
Well Name: 36

Figure A-135



Location of Well in Chino Basin

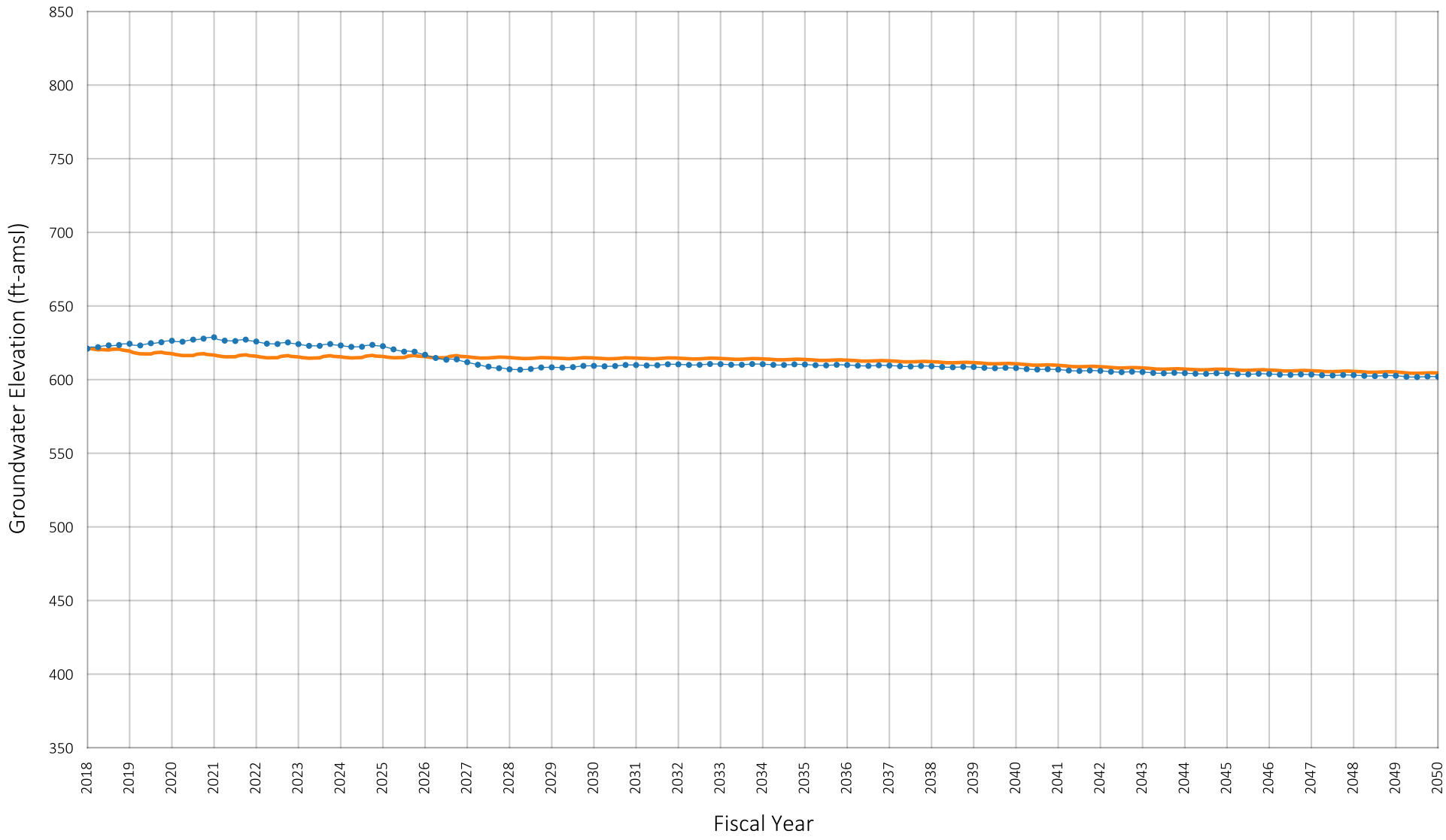
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002535
Owner: City of Upland
Well Name: 3

Figure A-136



Location of Well in Chino Basin

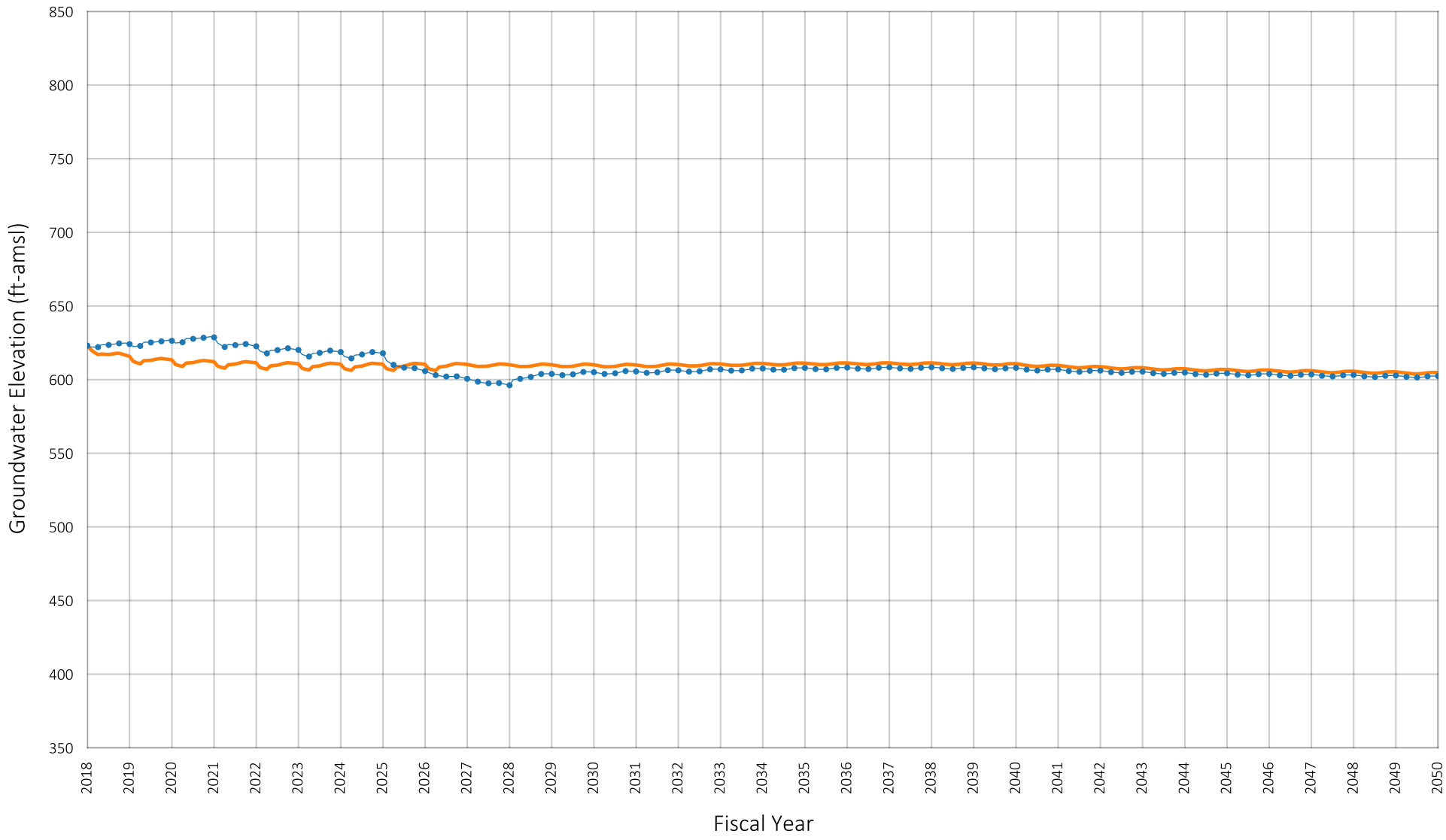
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1006997
Owner: City of Upland
Well Name: 7A

Figure A-137



Location of Well in Chino Basin

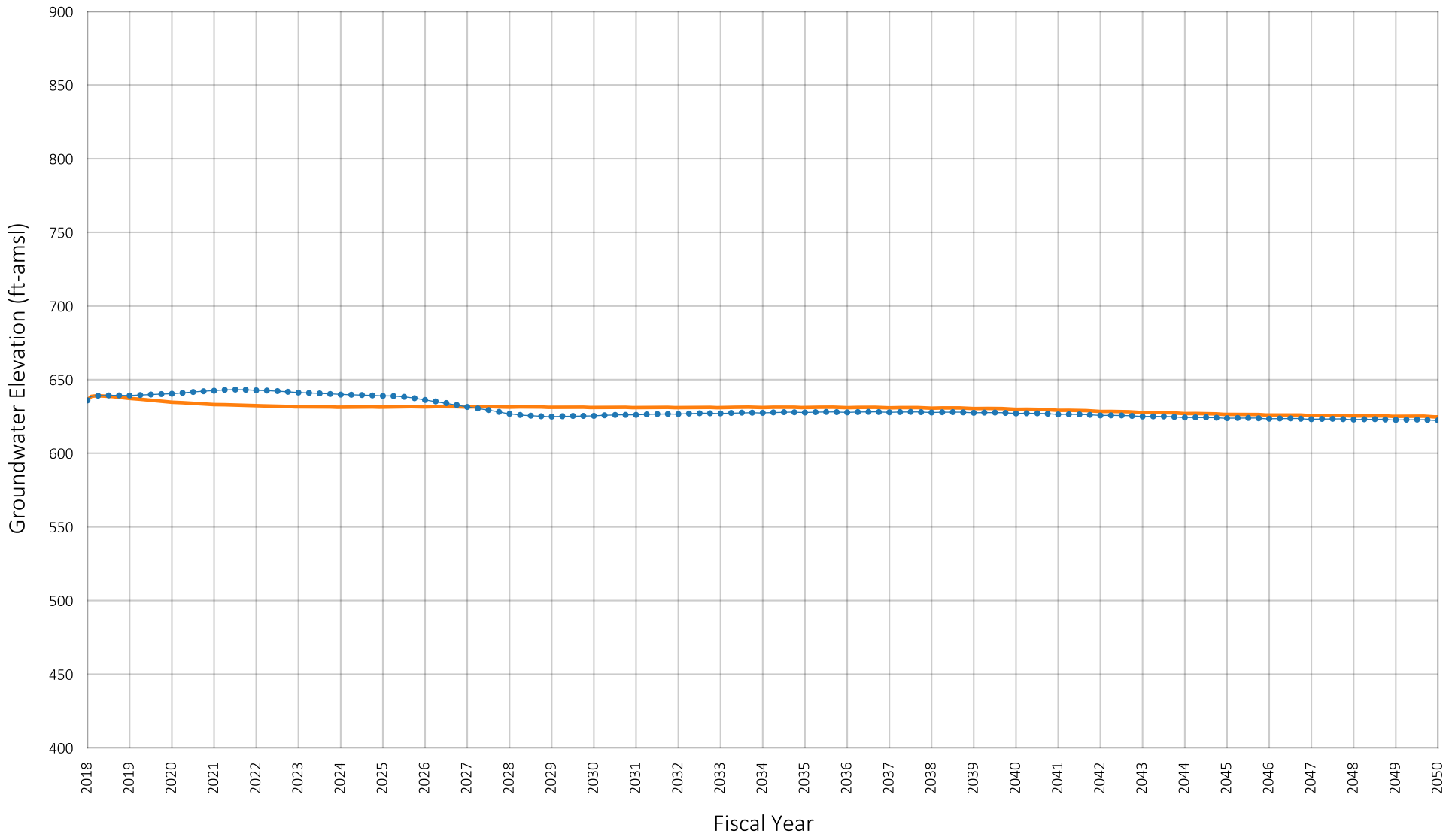
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1002531
Owner: City of Upland
Well Name: 8

Figure A-138



Location of Well in Chino Basin

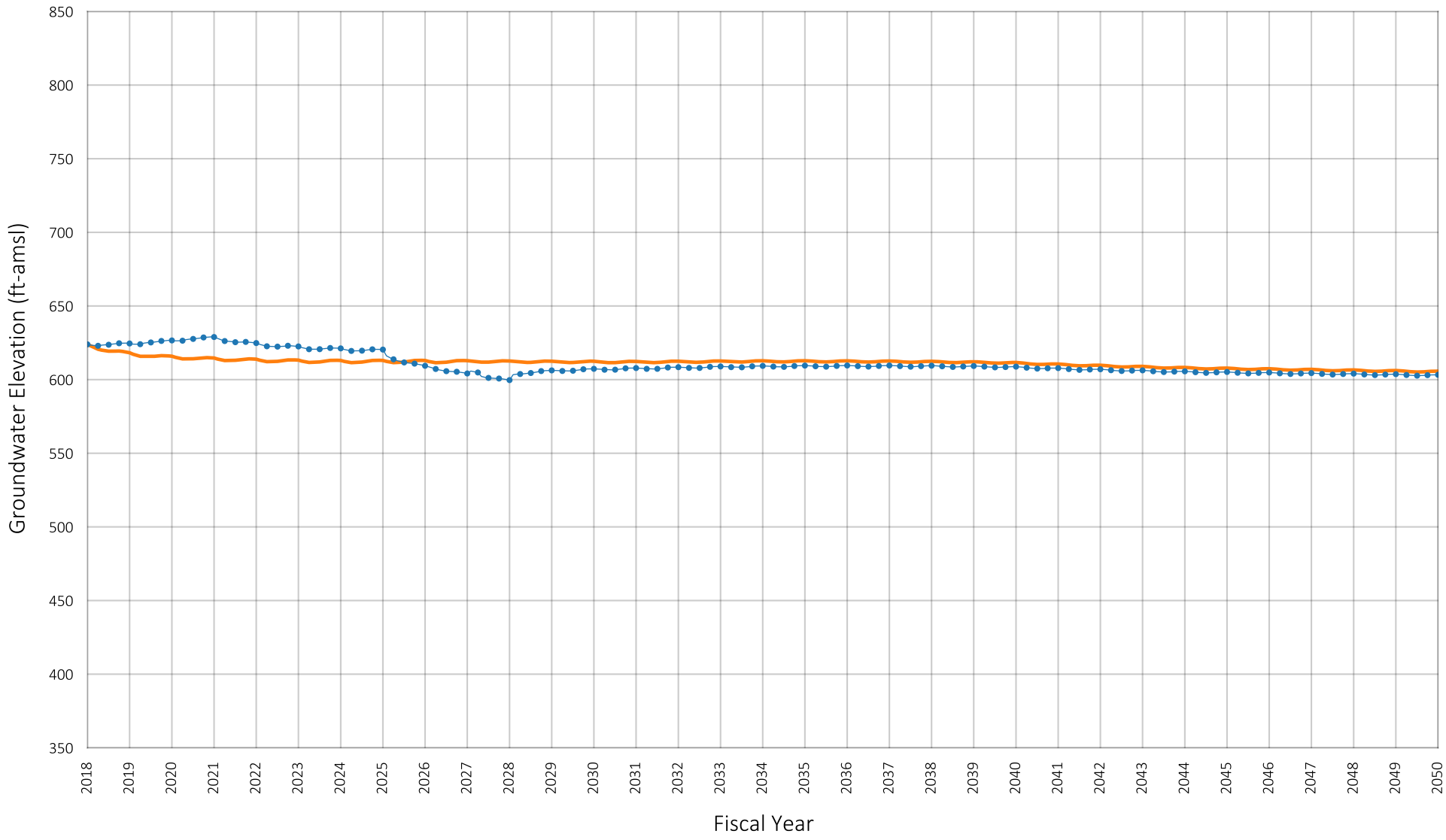
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206654
Owner: City of Upland
Well Name: 20

Figure A-139



Location of Well in Chino Basin

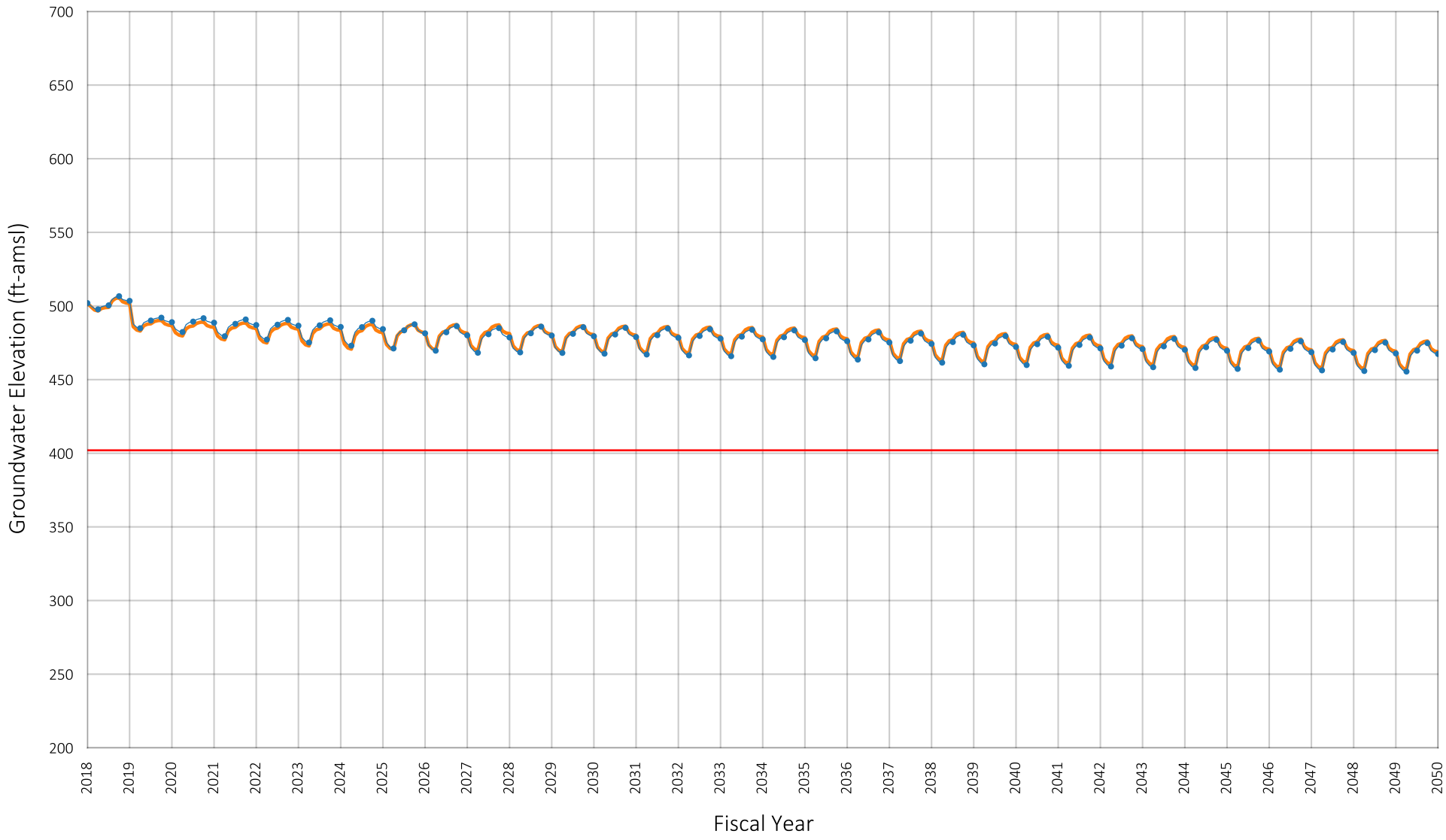
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1207956
Owner: City of Upland
Well Name: 21A

Figure A-140



Location of Well in Chino Basin

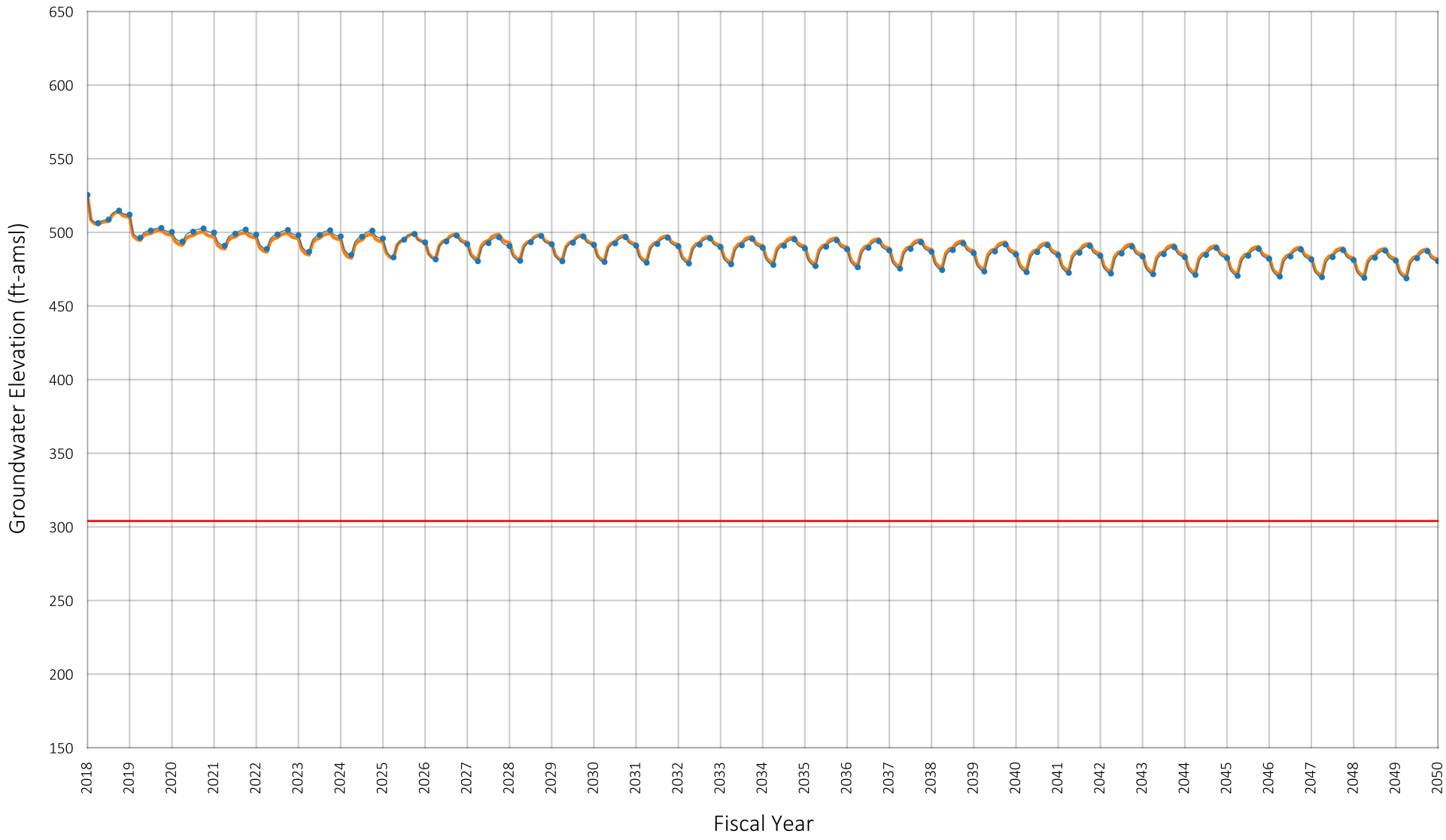
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206675
Owner: Chino Basin Desalter Authority
Well Name: I-1

Figure A-141



Location of Well in Chino Basin

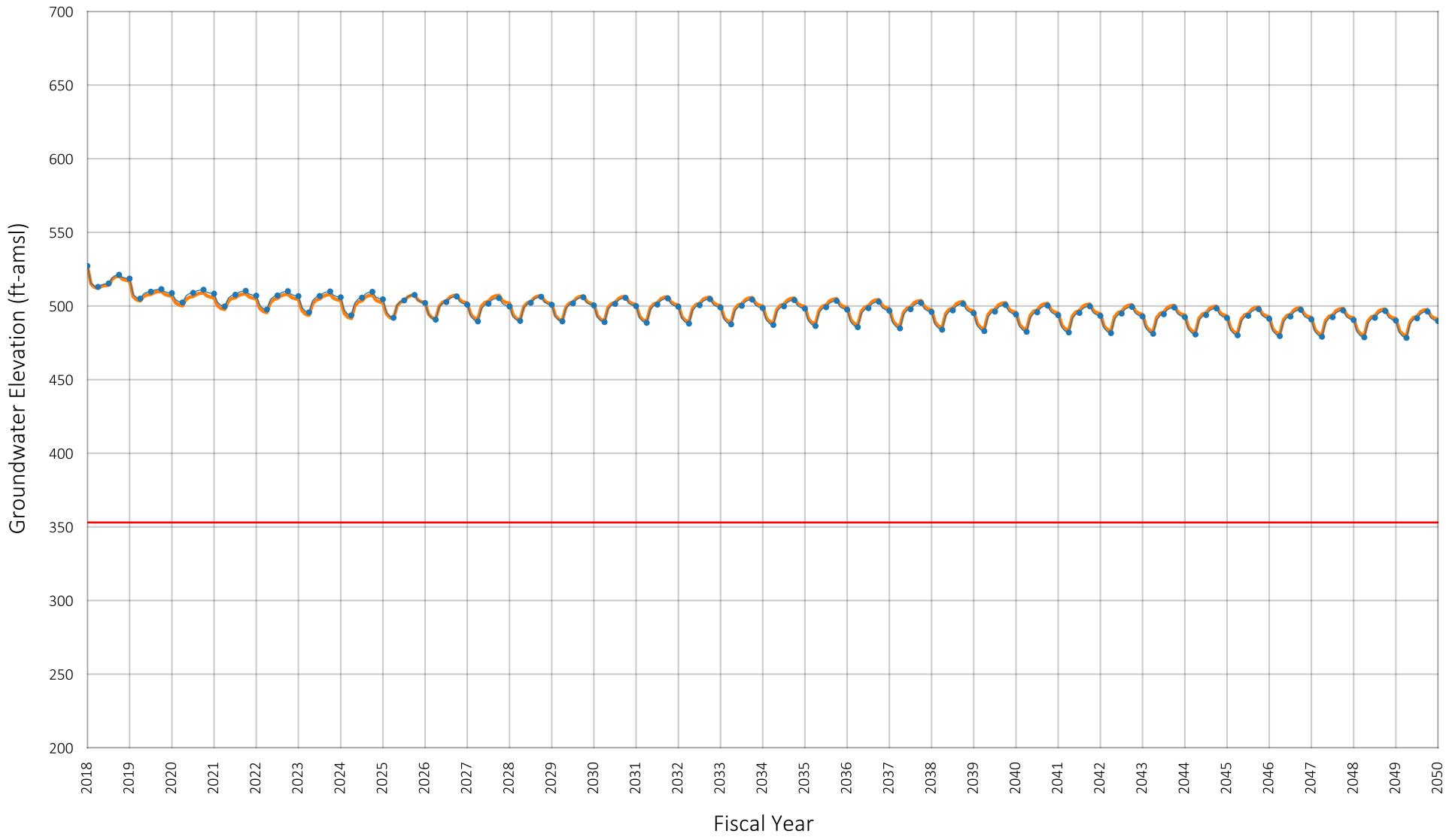
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206676
Owner: Chino Basin Desalter Authority
Well Name: I-2

Figure A-142



Location of Well in Chino Basin

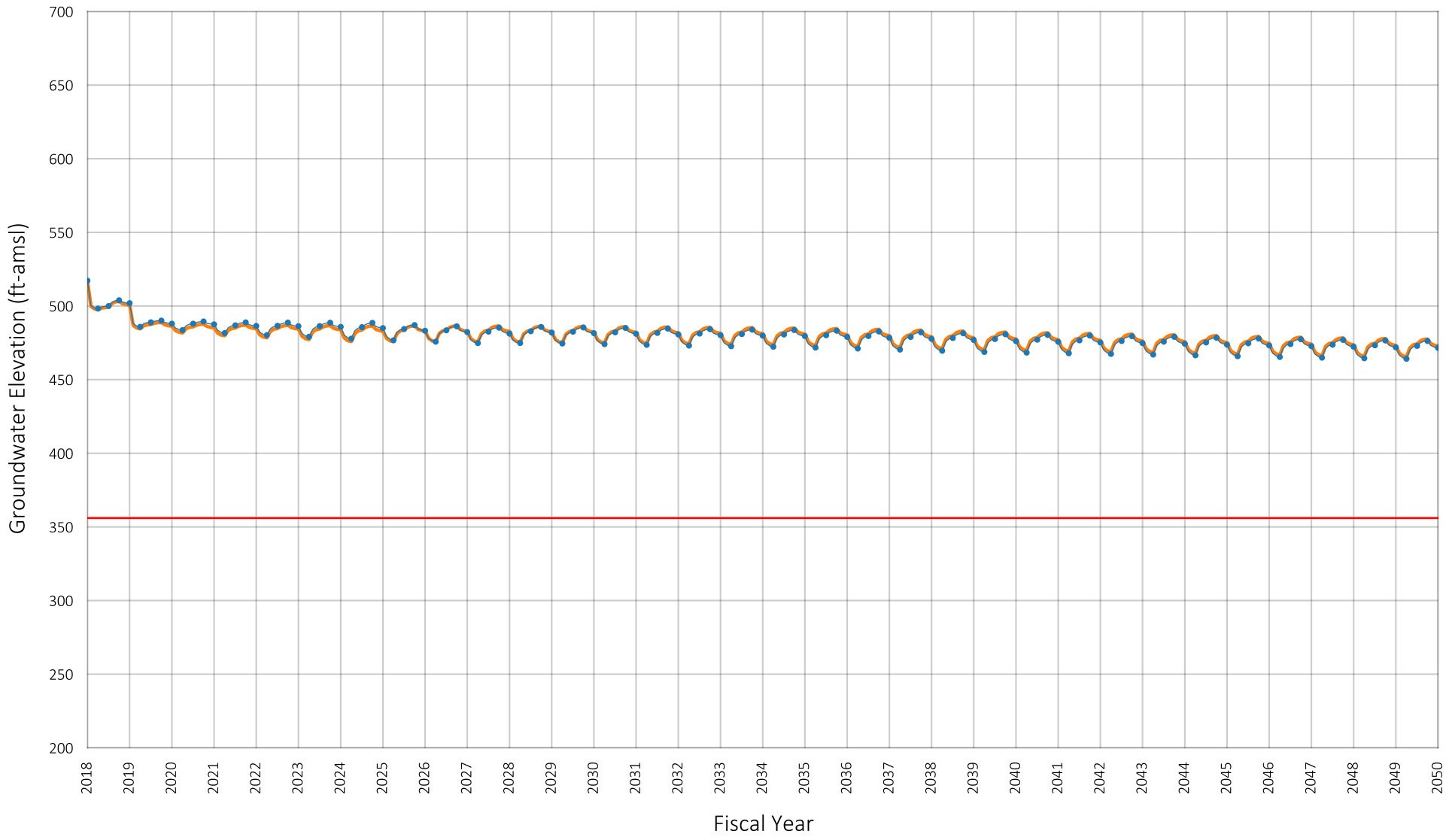
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206677
Owner: Chino Basin Desalter Authority
Well Name: I-3

Figure A-143



Location of Well in Chino Basin

SYR1

LSLS

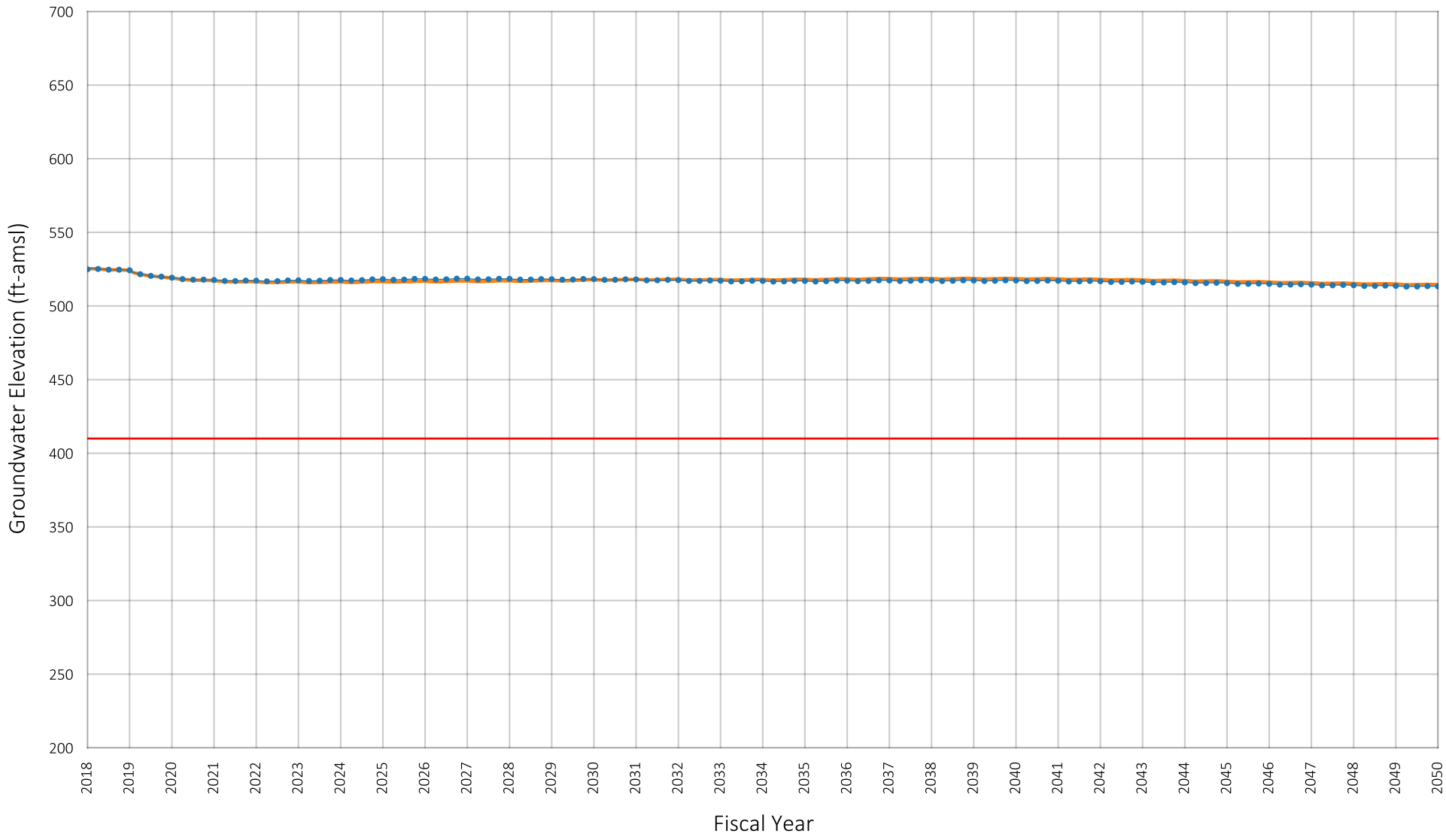
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206678
Owner: Chino Basin Desalter Authority
Well Name: I-4

Figure A-144



Location of Well in Chino Basin

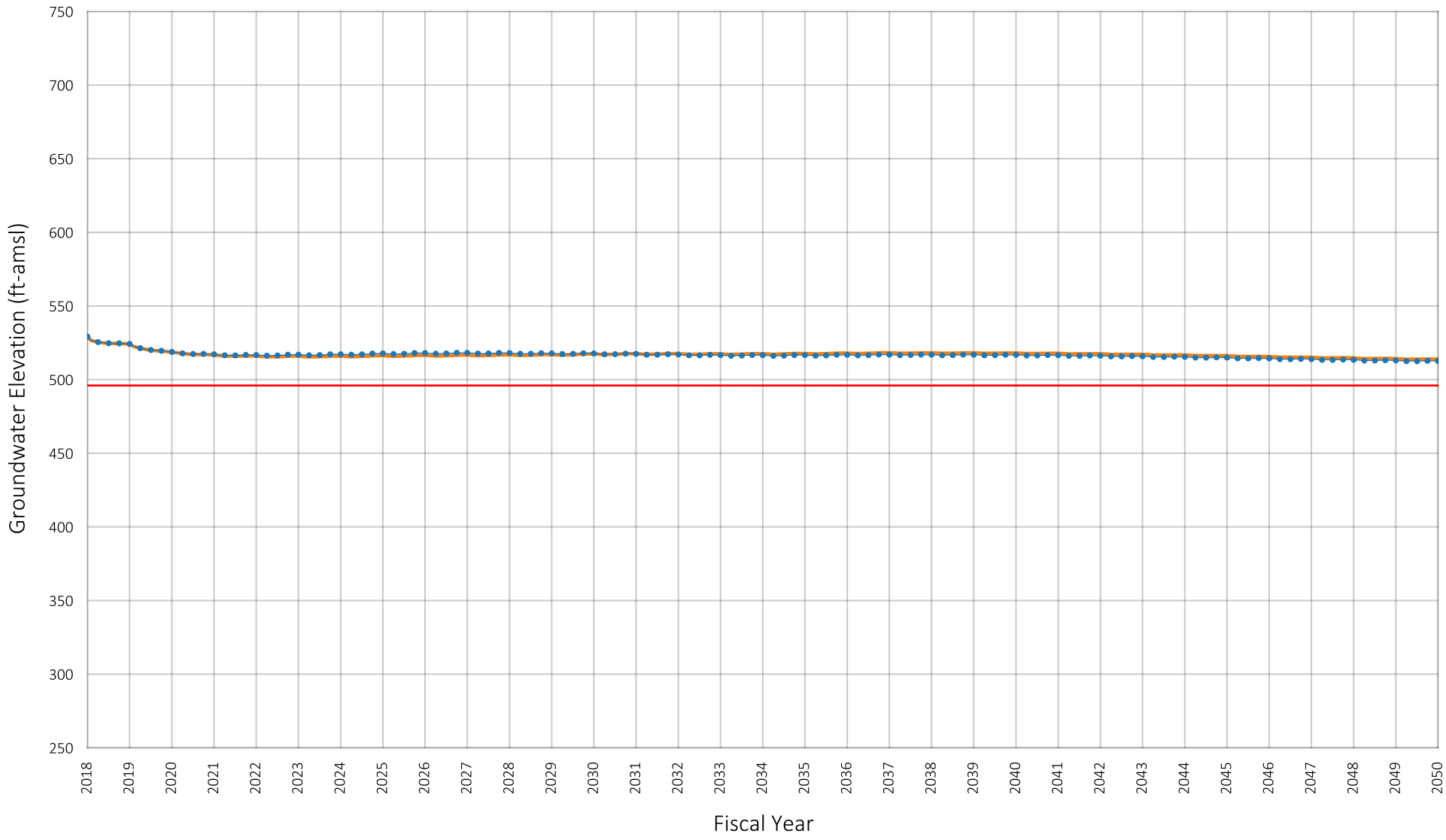
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206679
Owner: Chino Basin Desalter Authority
Well Name: I-5

Figure A-145



Location of Well in Chino Basin

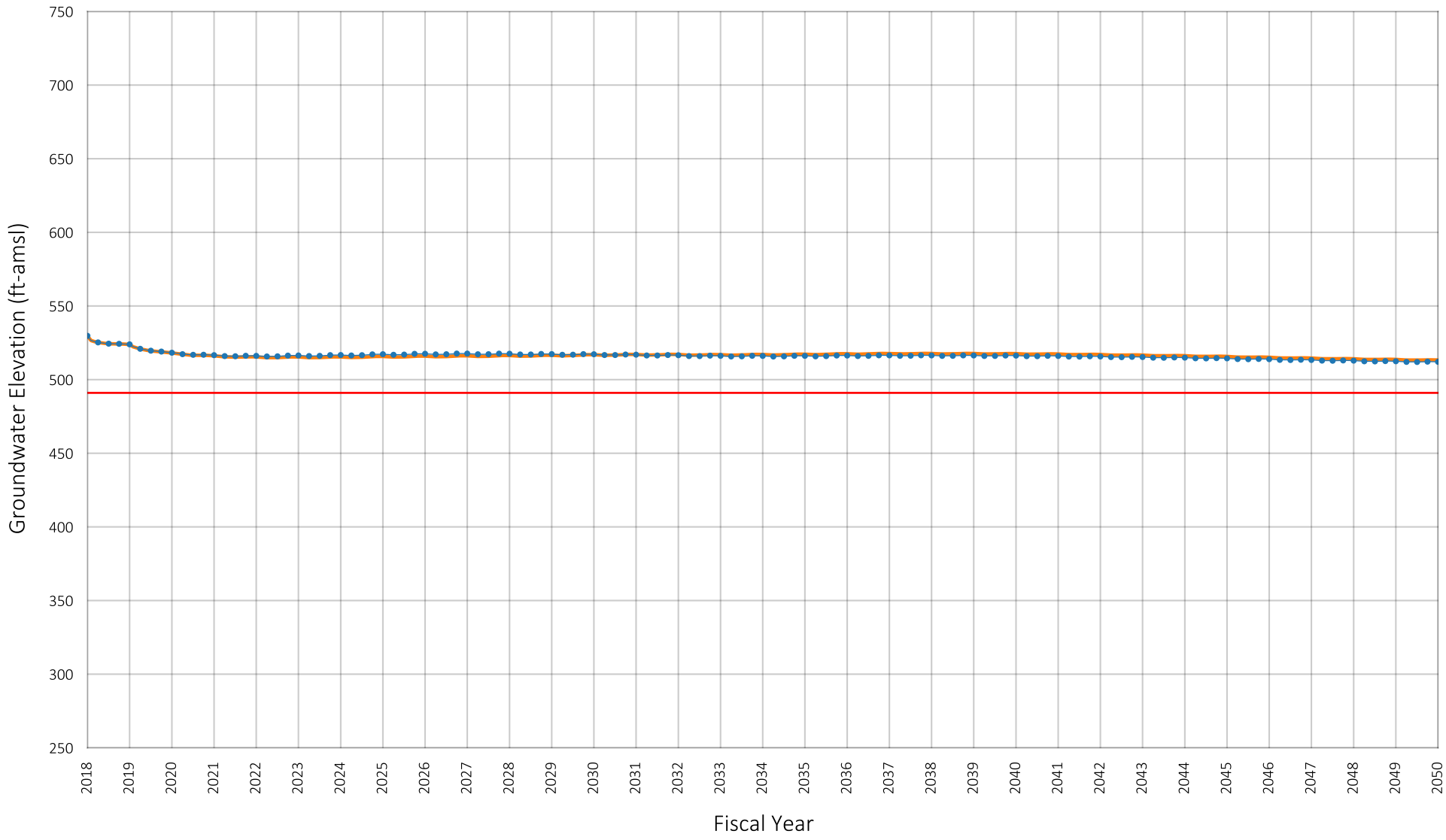
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206684
Owner: Chino Basin Desalter Authority
Well Name: I-6

Figure A-146



Location of Well in Chino Basin

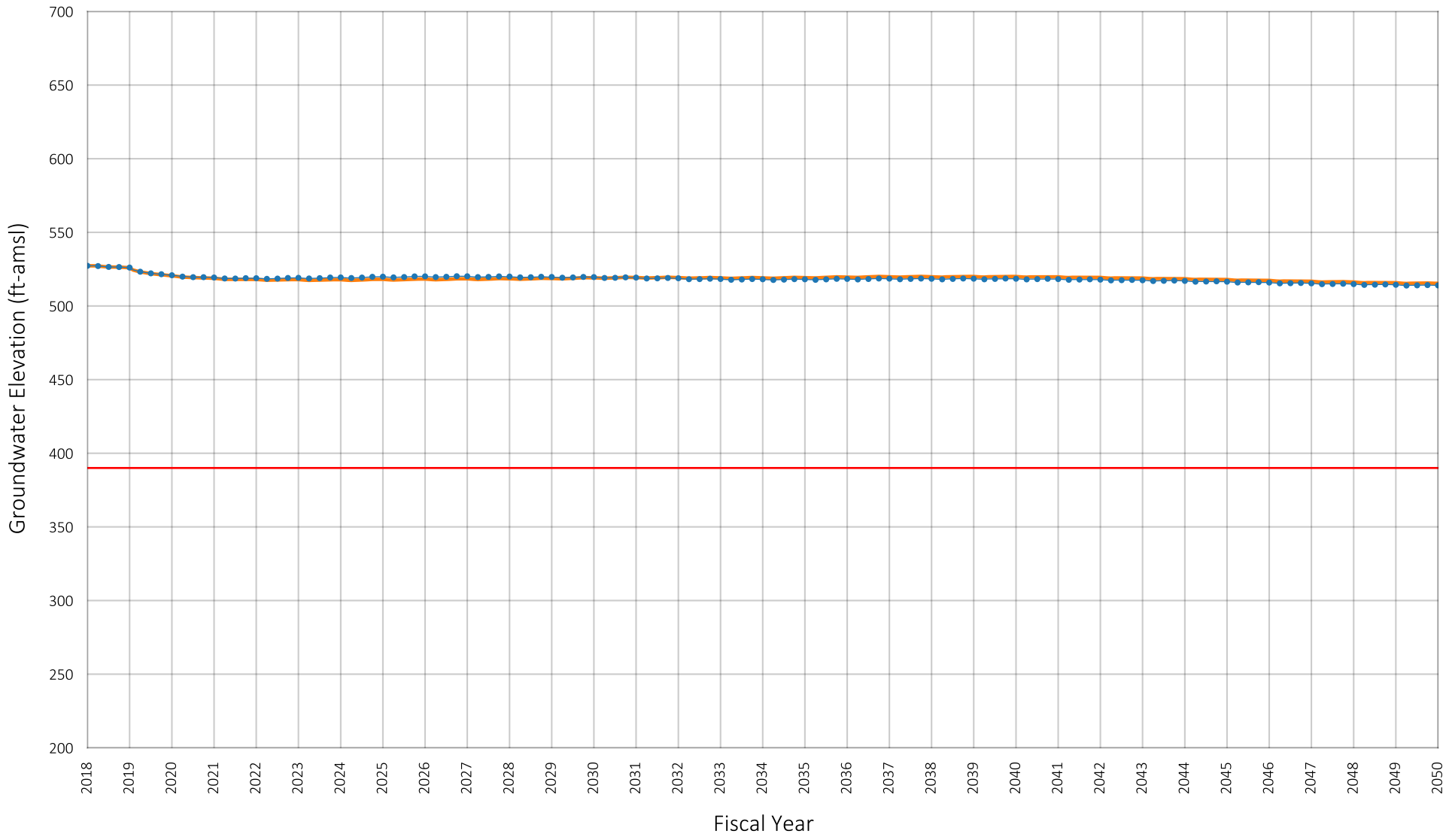
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206685
Owner: Chino Basin Desalter Authority
Well Name: I-7

Figure A-147



Location of Well in Chino Basin

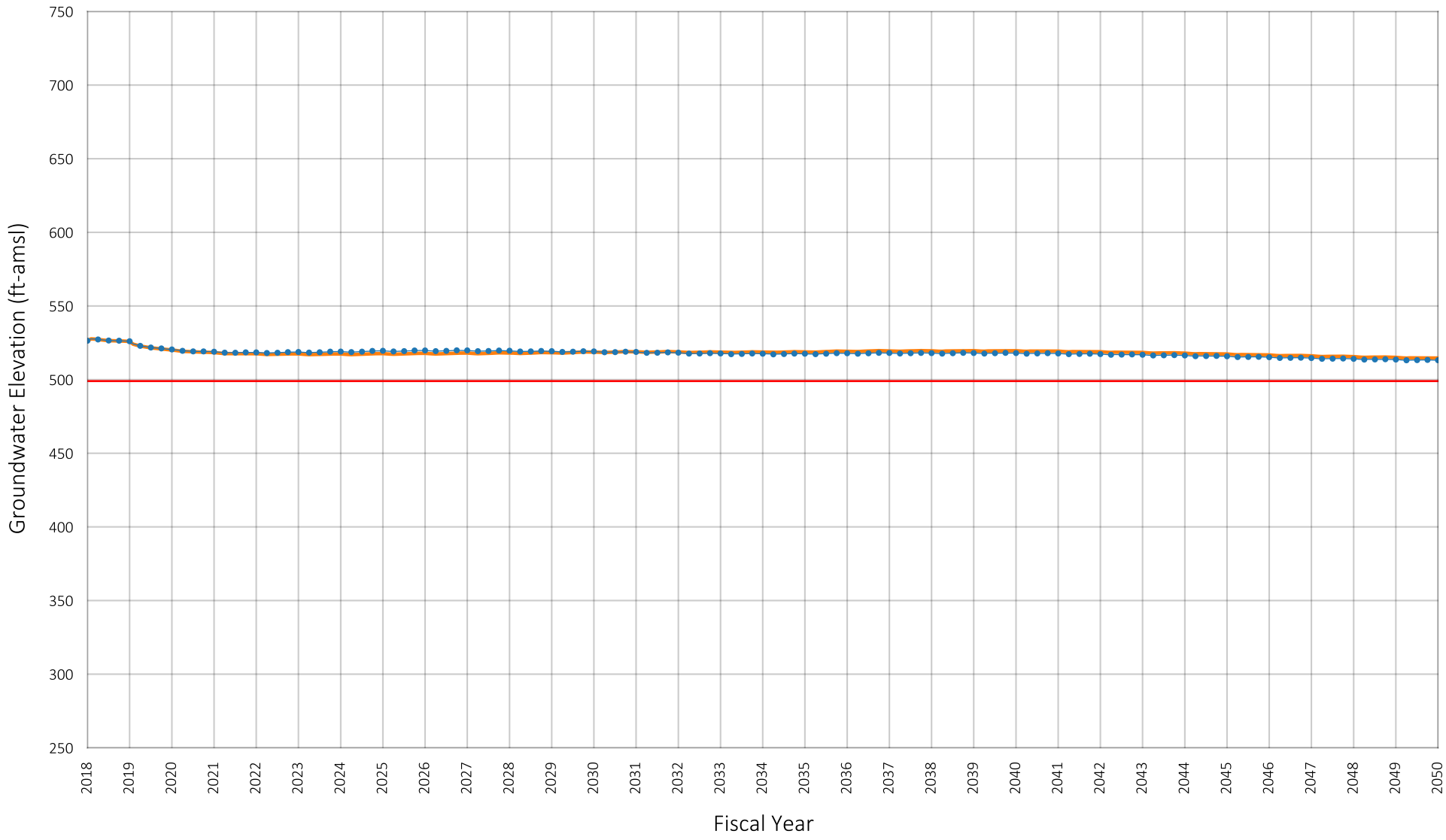
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206680
Owner: Chino Basin Desalter Authority
Well Name: I-8

Figure A-148



Location of Well in Chino Basin

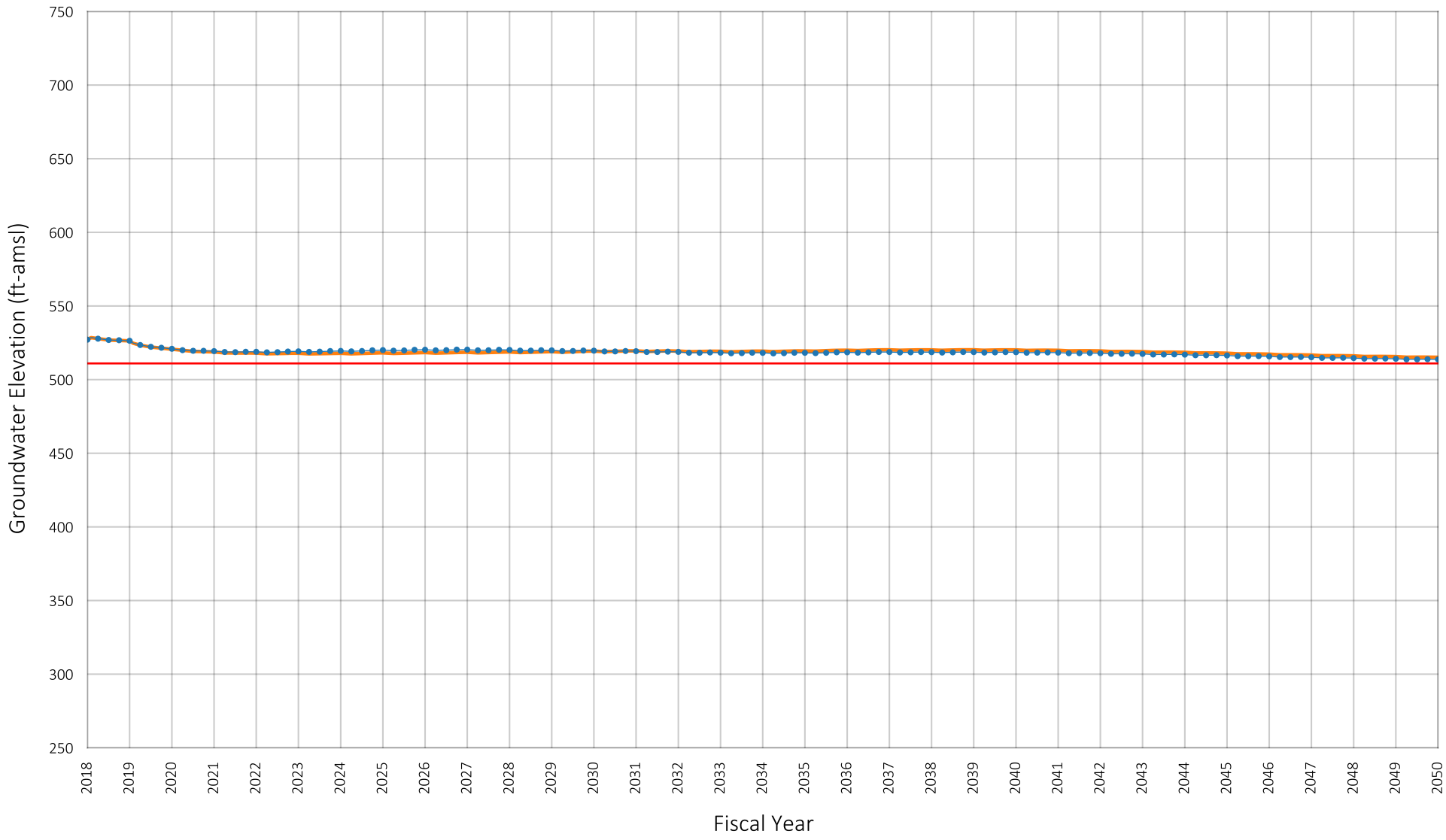
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206681
Owner: Chino Basin Desalter Authority
Well Name: I-9

Figure A-149



Location of Well in Chino Basin

SYR1

LSLS

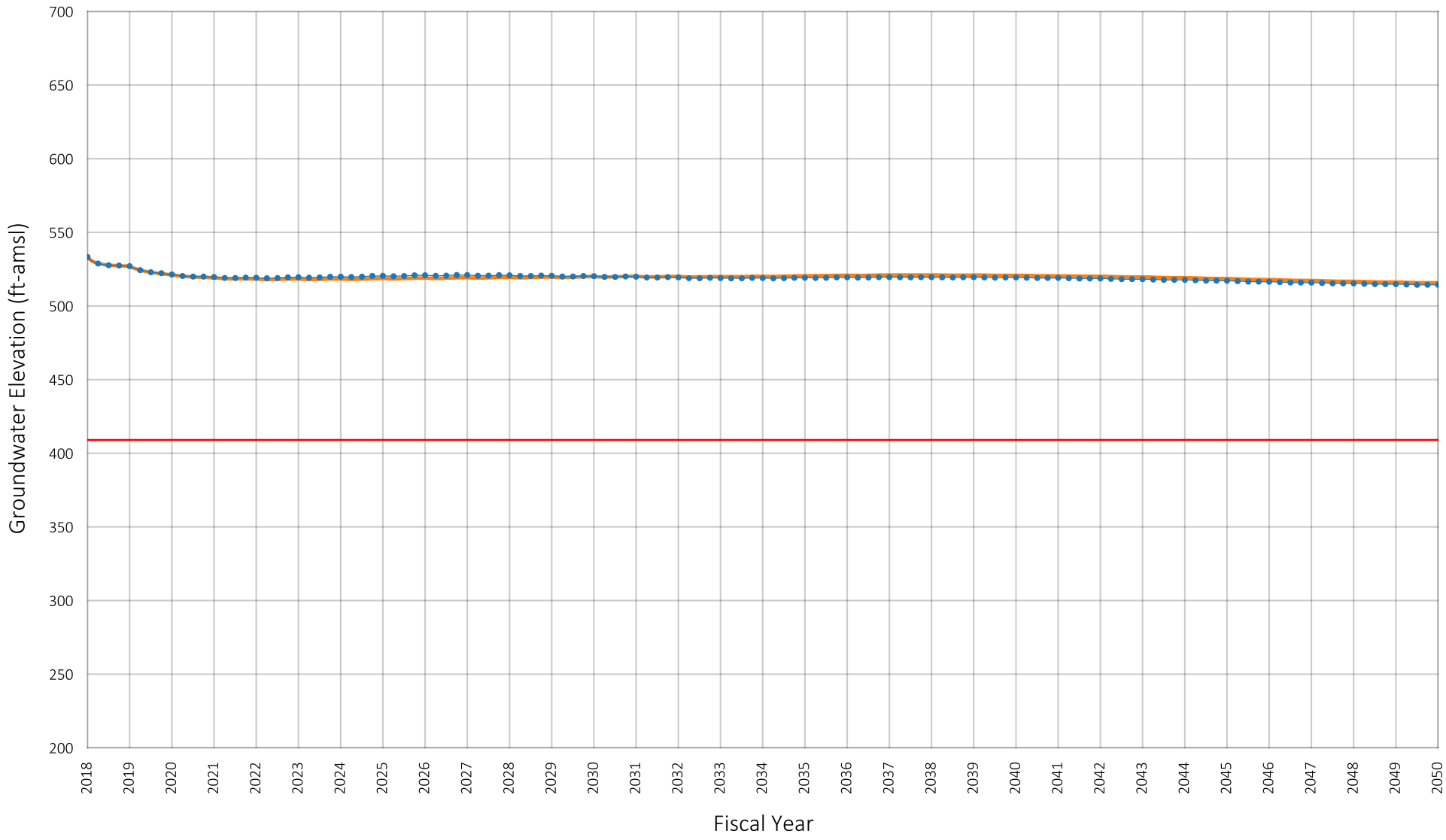
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206682
Owner: Chino Basin Desalter Authority
Well Name: I-10

Figure A-150



Location of Well in Chino Basin

SYR1

LSLS

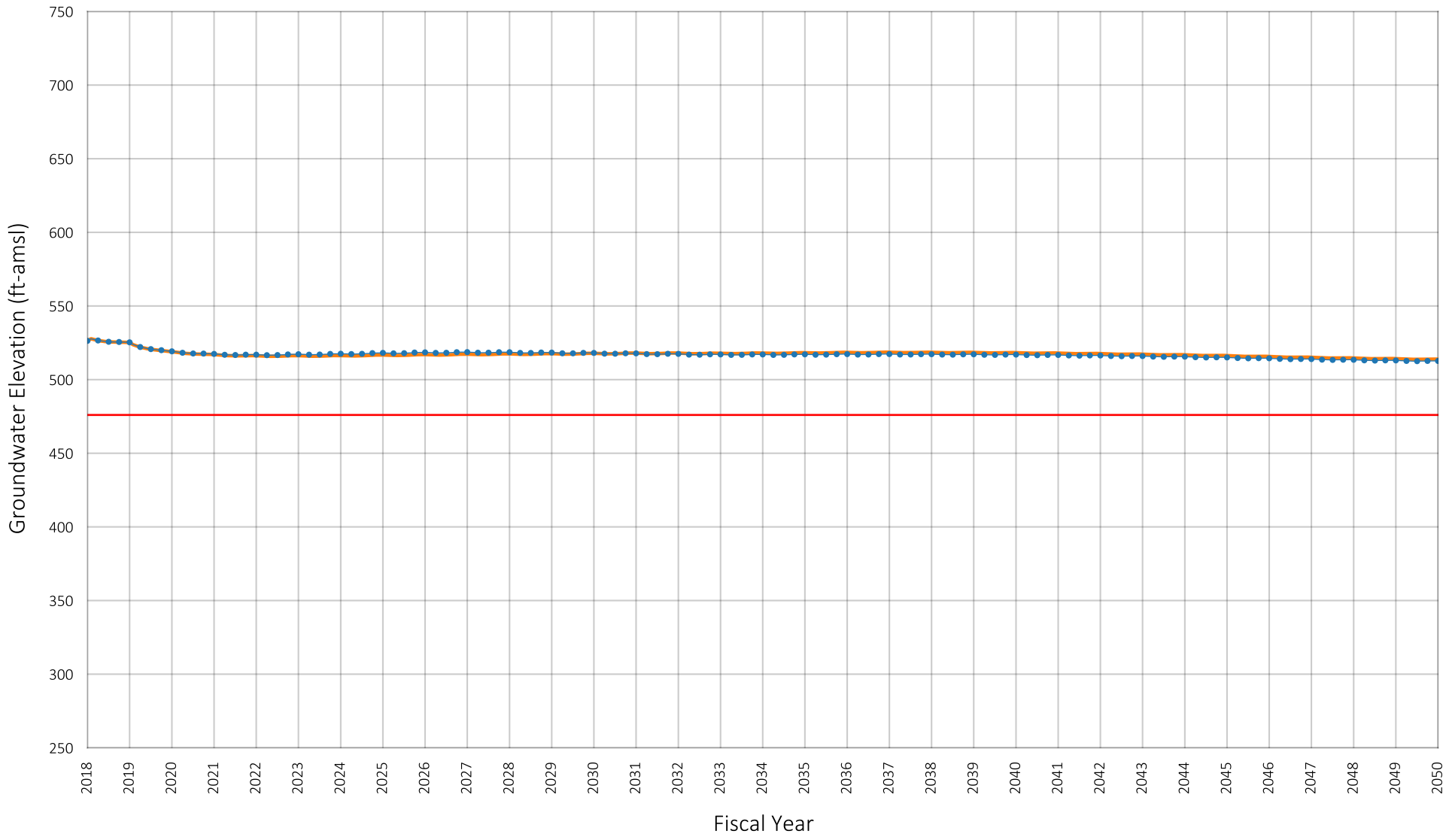
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206683
Owner: Chino Basin Desalter Authority
Well Name: I-11

Figure A-151



Location of Well in Chino Basin

SYR1

LSLS

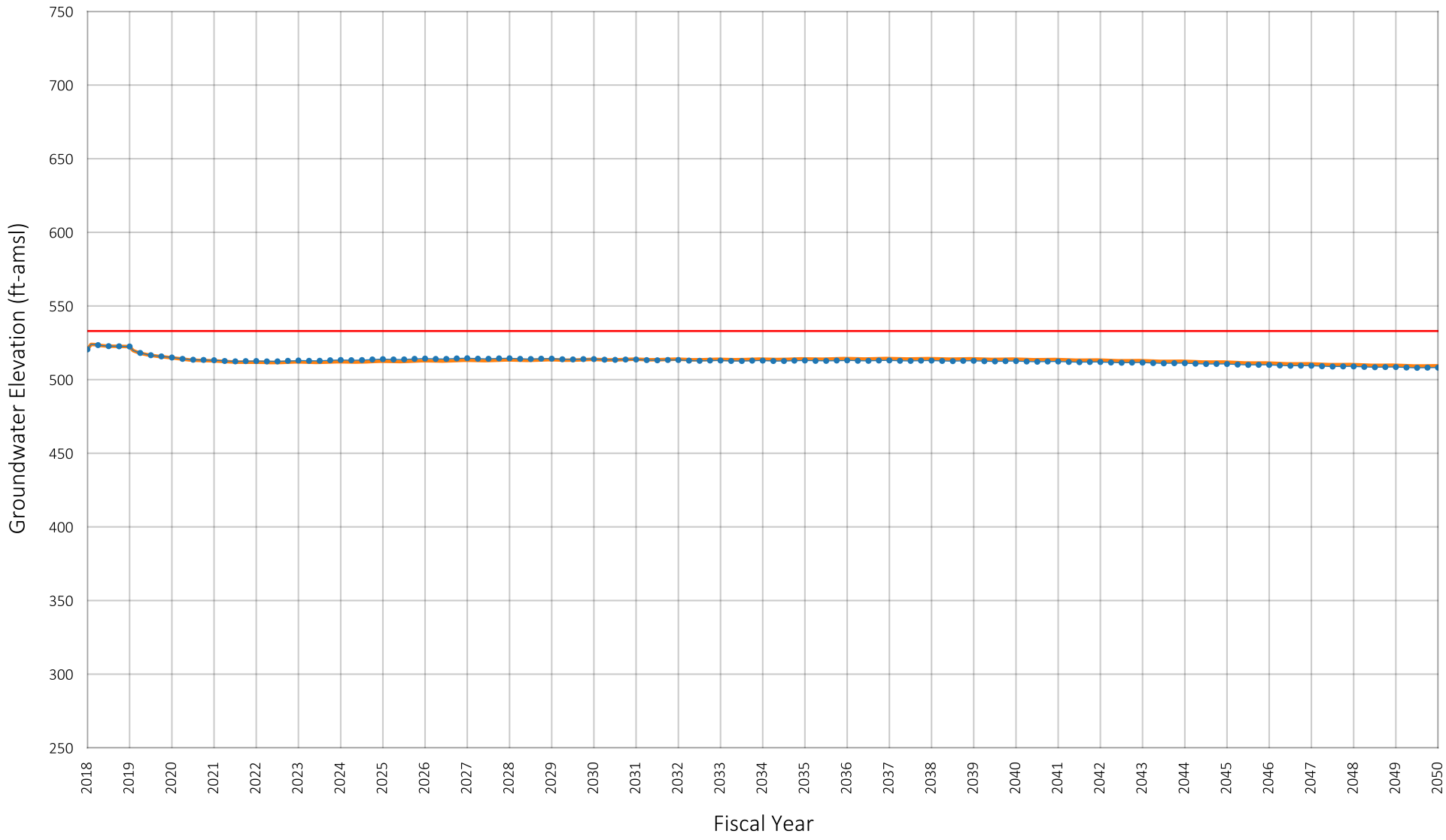
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206958
Owner: Chino Basin Desalter Authority
Well Name: I-13

Figure A-152



Location of Well in Chino Basin

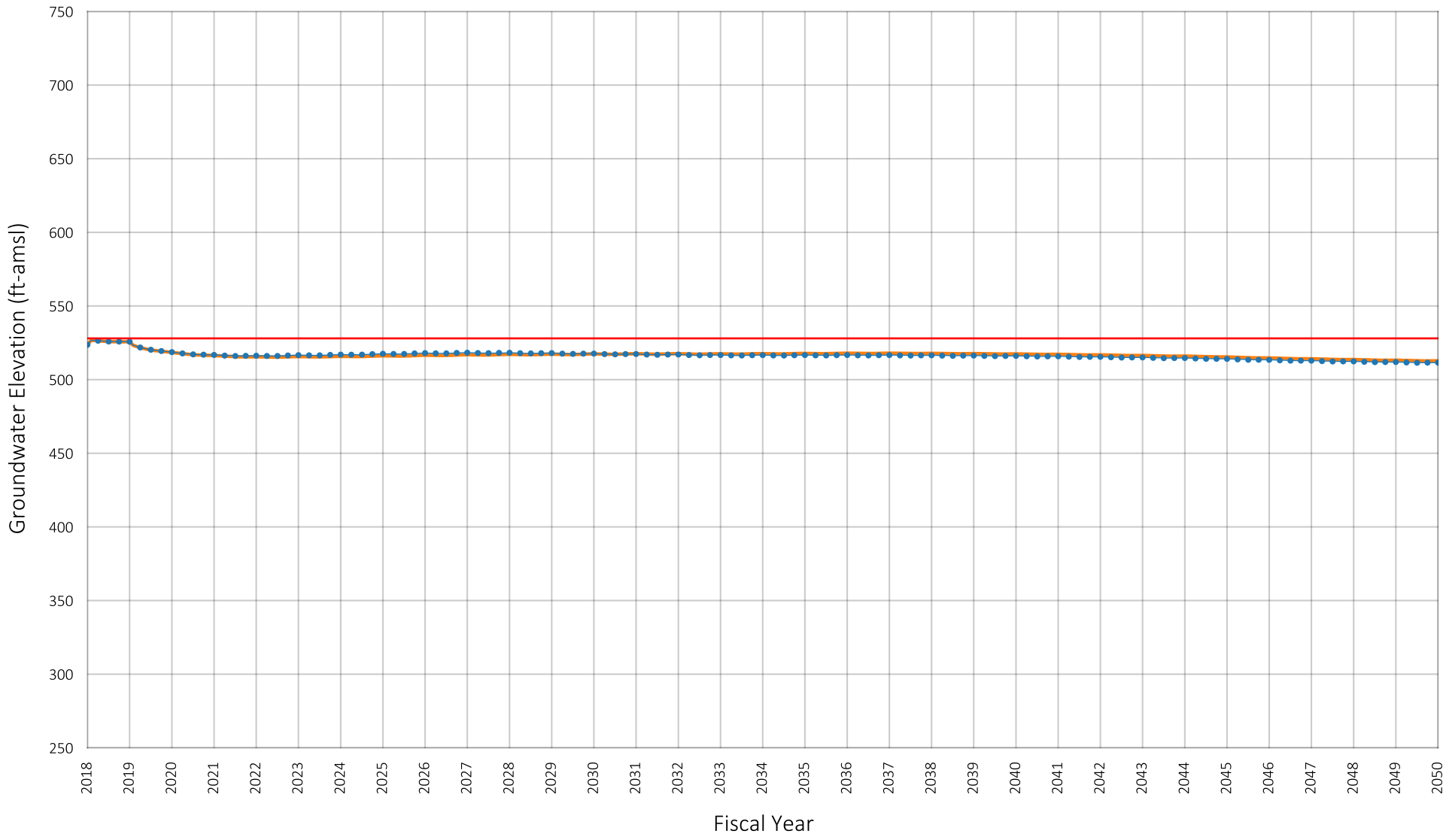
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206959
Owner: Chino Basin Desalter Authority
Well Name: I-14

Figure A-153



Location of Well in Chino Basin

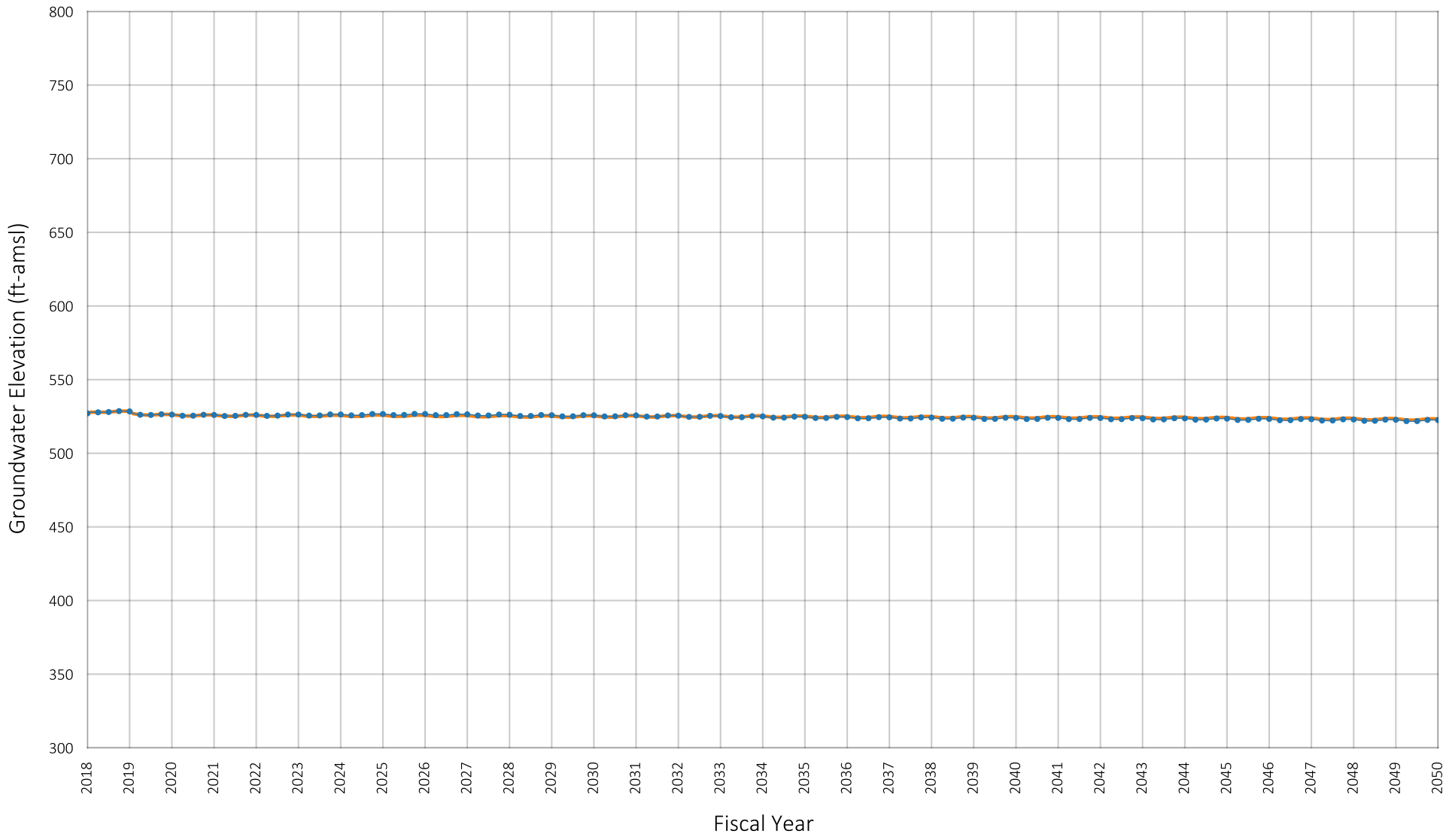
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206960
Owner: Chino Basin Desalter Authority
Well Name: I-15

Figure A-154



Location of Well in Chino Basin

SYR1

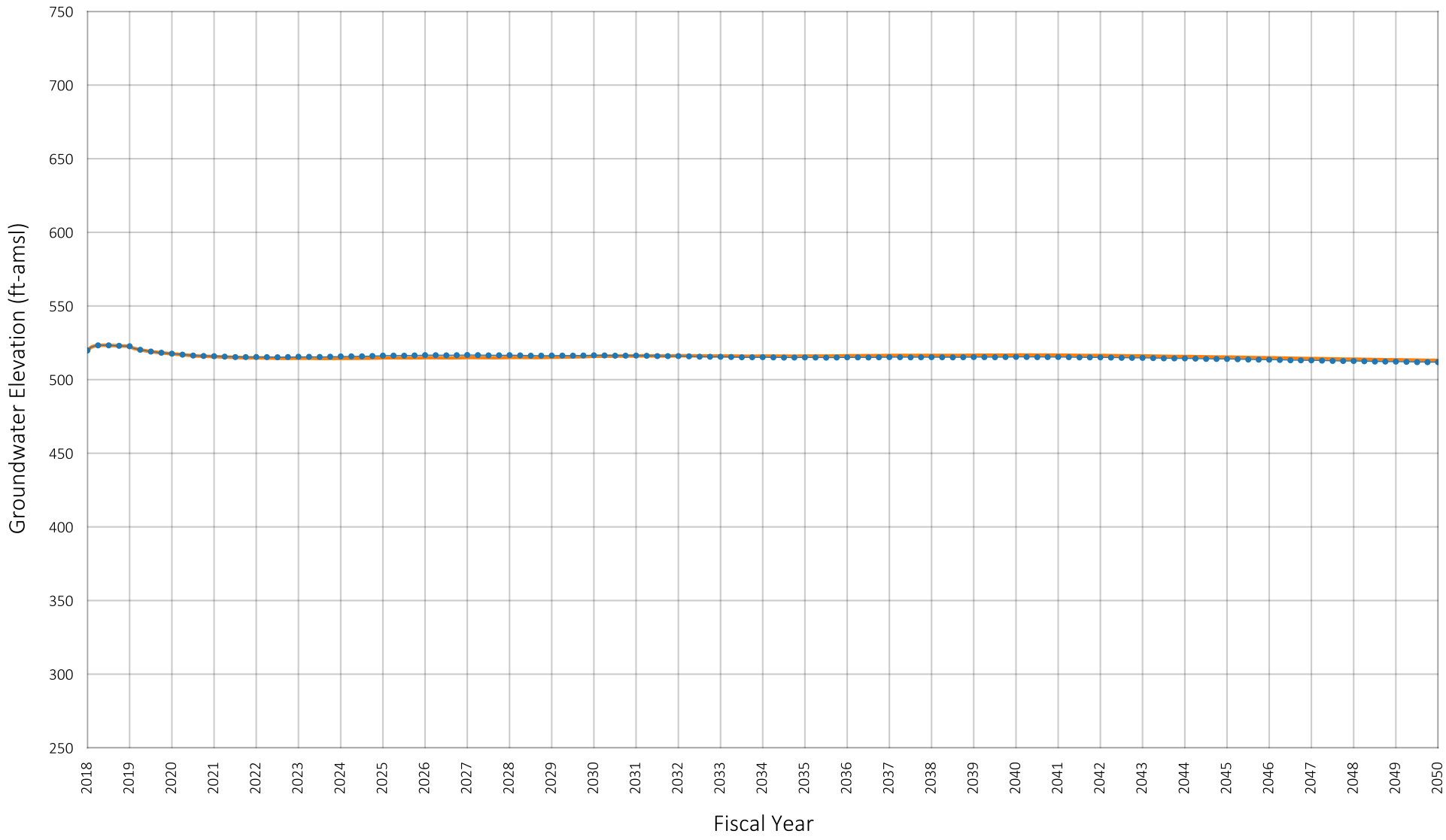
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1222970
Owner: Chino Basin Desalter Authority
Well Name: I-16

Figure A-155



Location of Well in Chino Basin

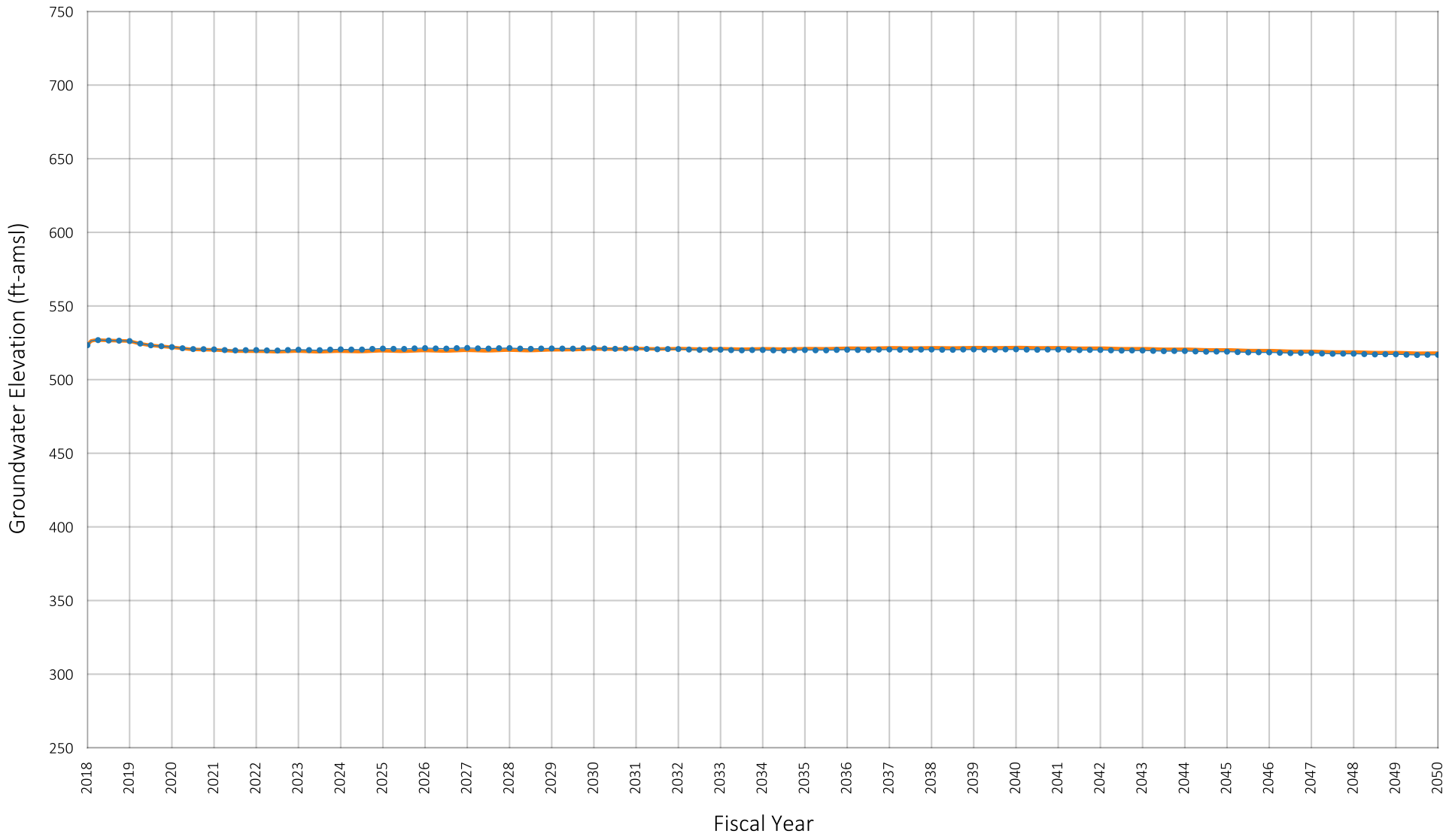
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1224801
Owner: Chino Basin Desalter Authority
Well Name: I-20

Figure A-156



Location of Well in Chino Basin

SYR1

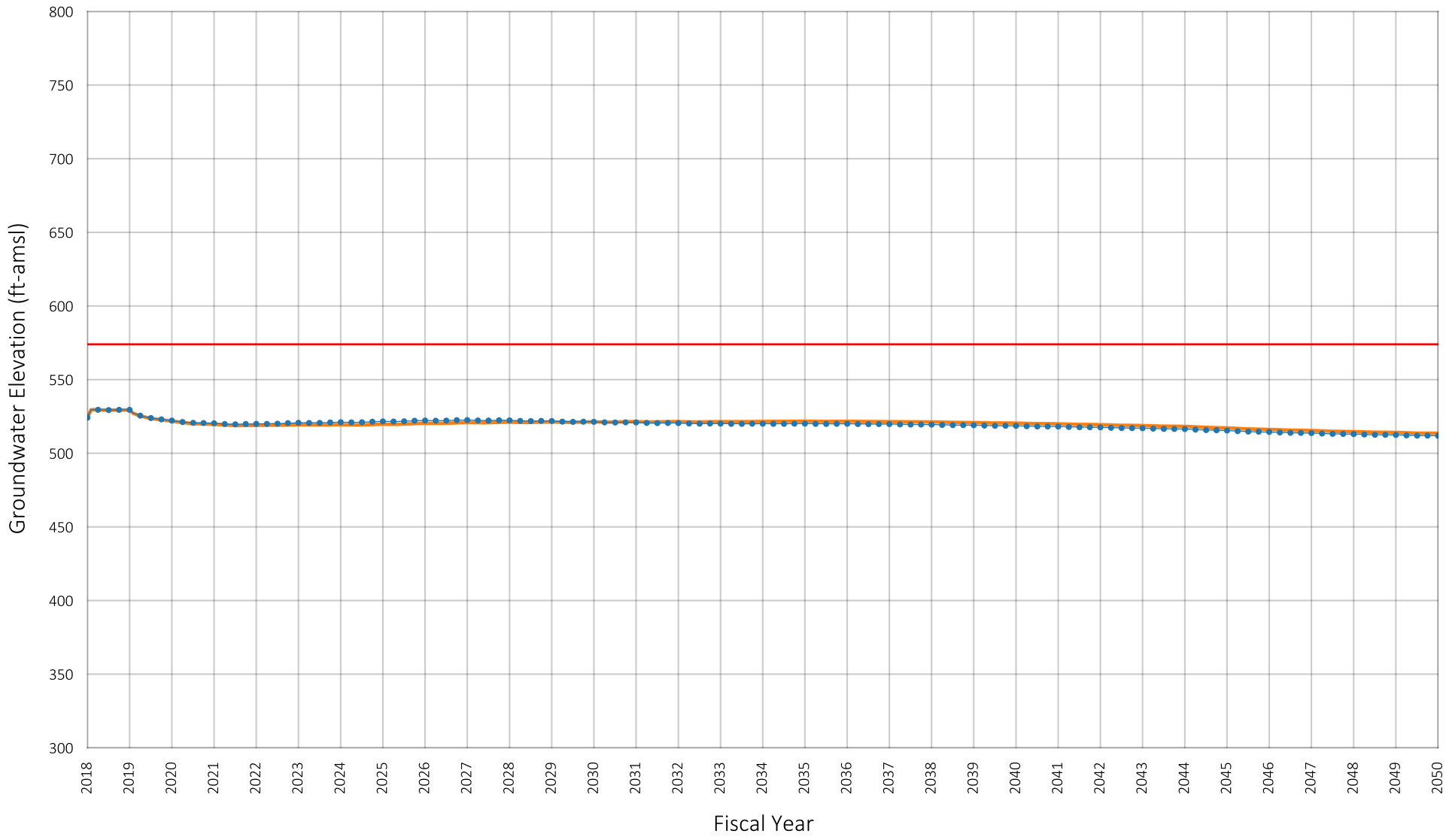
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1224812
Owner: Chino Basin Desalter Authority
Well Name: I-21

Figure A-157



Location of Well in Chino Basin

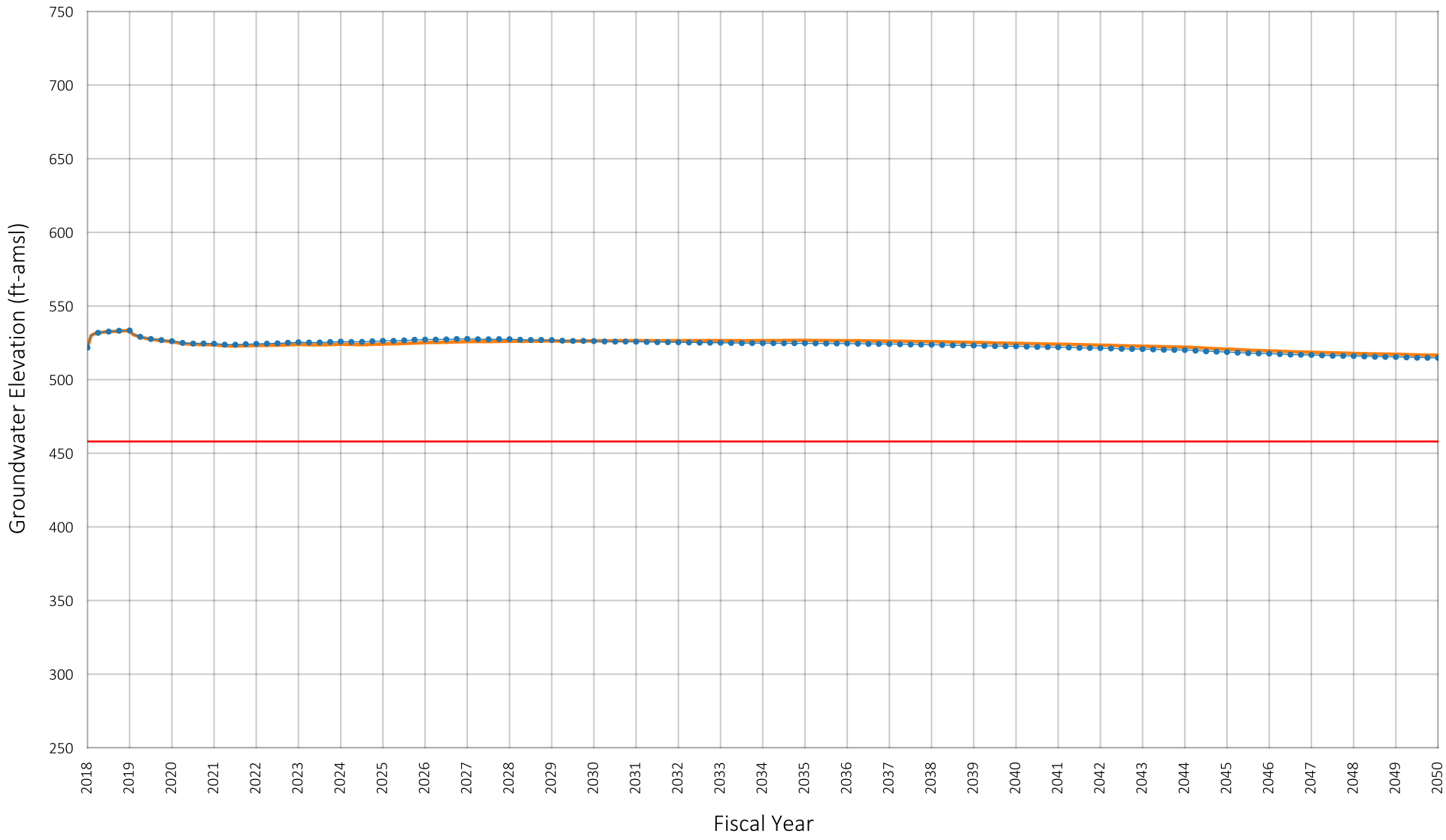
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206961
Owner: Chino Basin Desalter Authority
Well Name: II-1

Figure A-158



Location of Well in Chino Basin

SYR1

LSLS

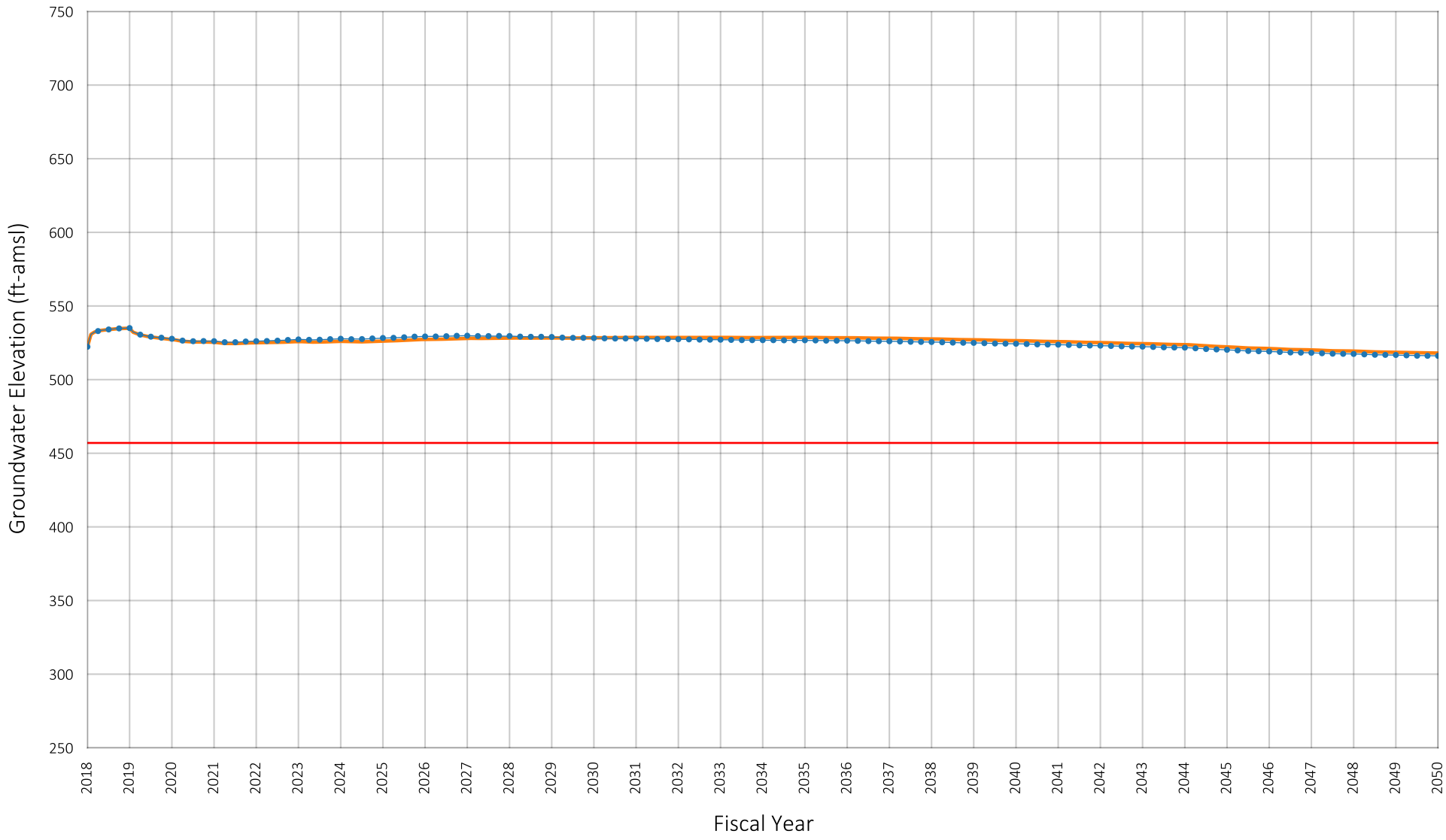
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206962
Owner: Chino Basin Desalter Authority
Well Name: II-2

Figure A-159



Location of Well in Chino Basin

SYR1

LSLS

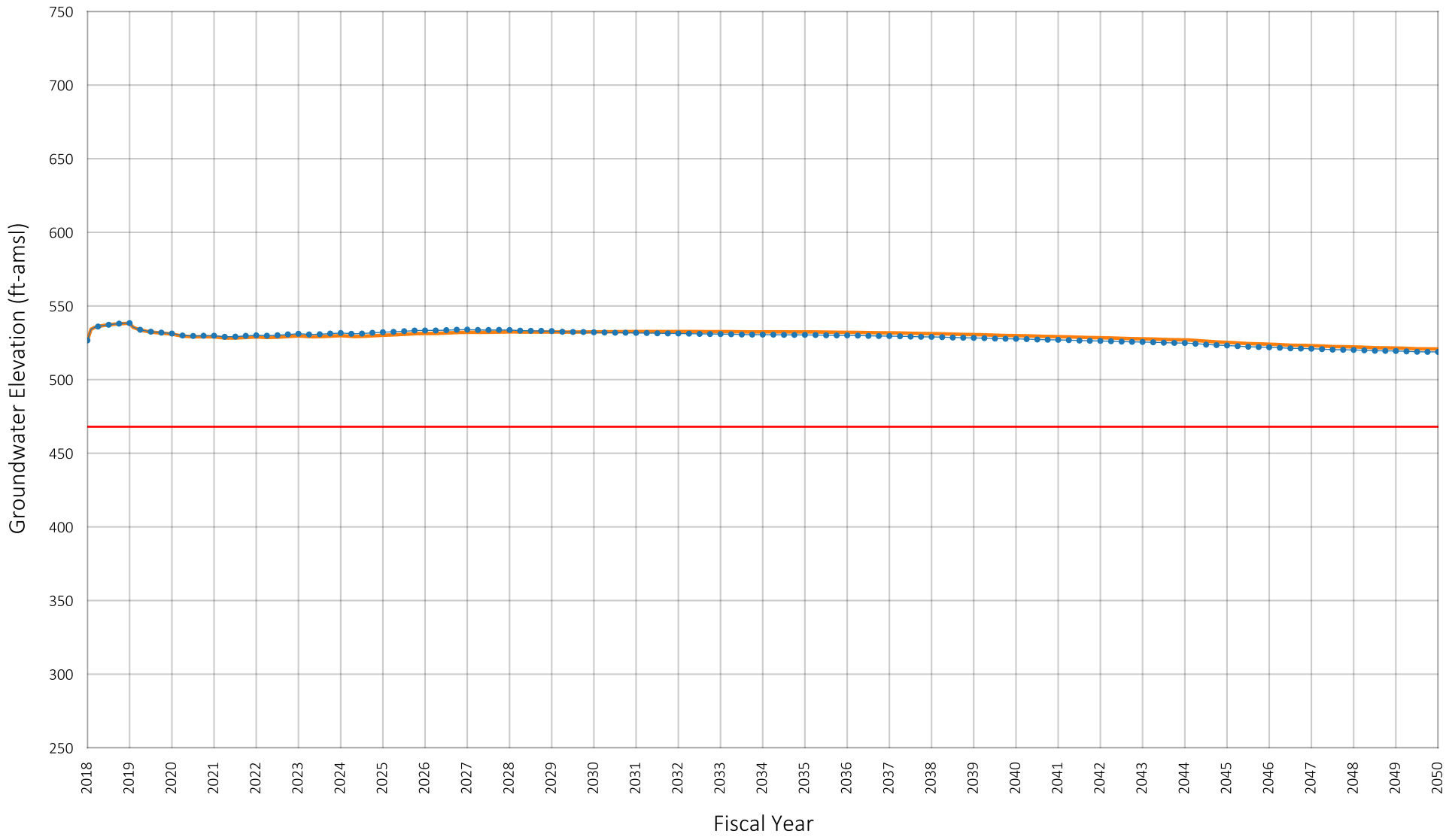
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206963
Owner: Chino Basin Desalter Authority
Well Name: II-3

Figure A-160



Location of Well in Chino Basin

SYR1

LSLS

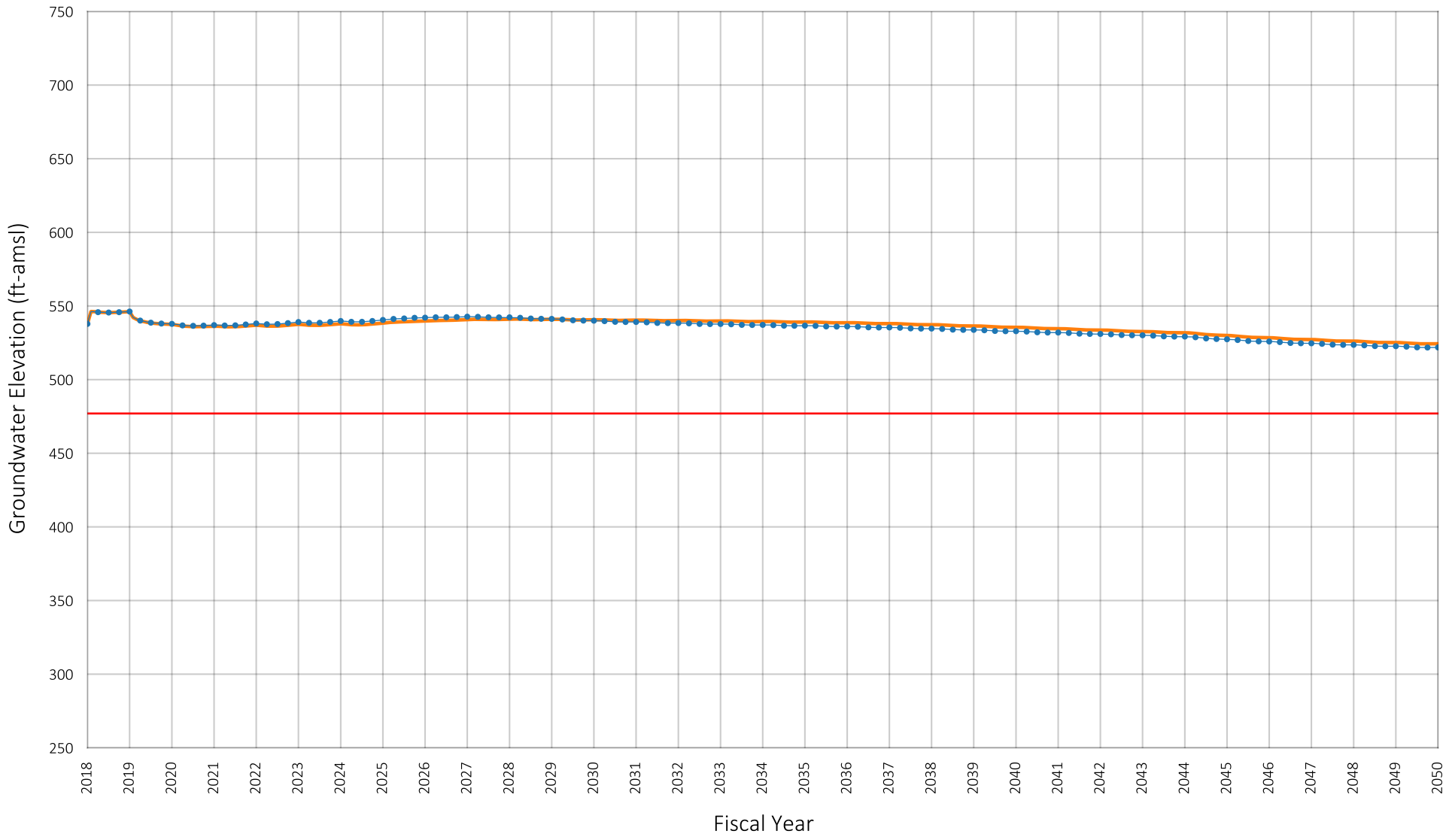
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206964
Owner: Chino Basin Desalter Authority
Well Name: II-4

Figure A-161



Location of Well in Chino Basin

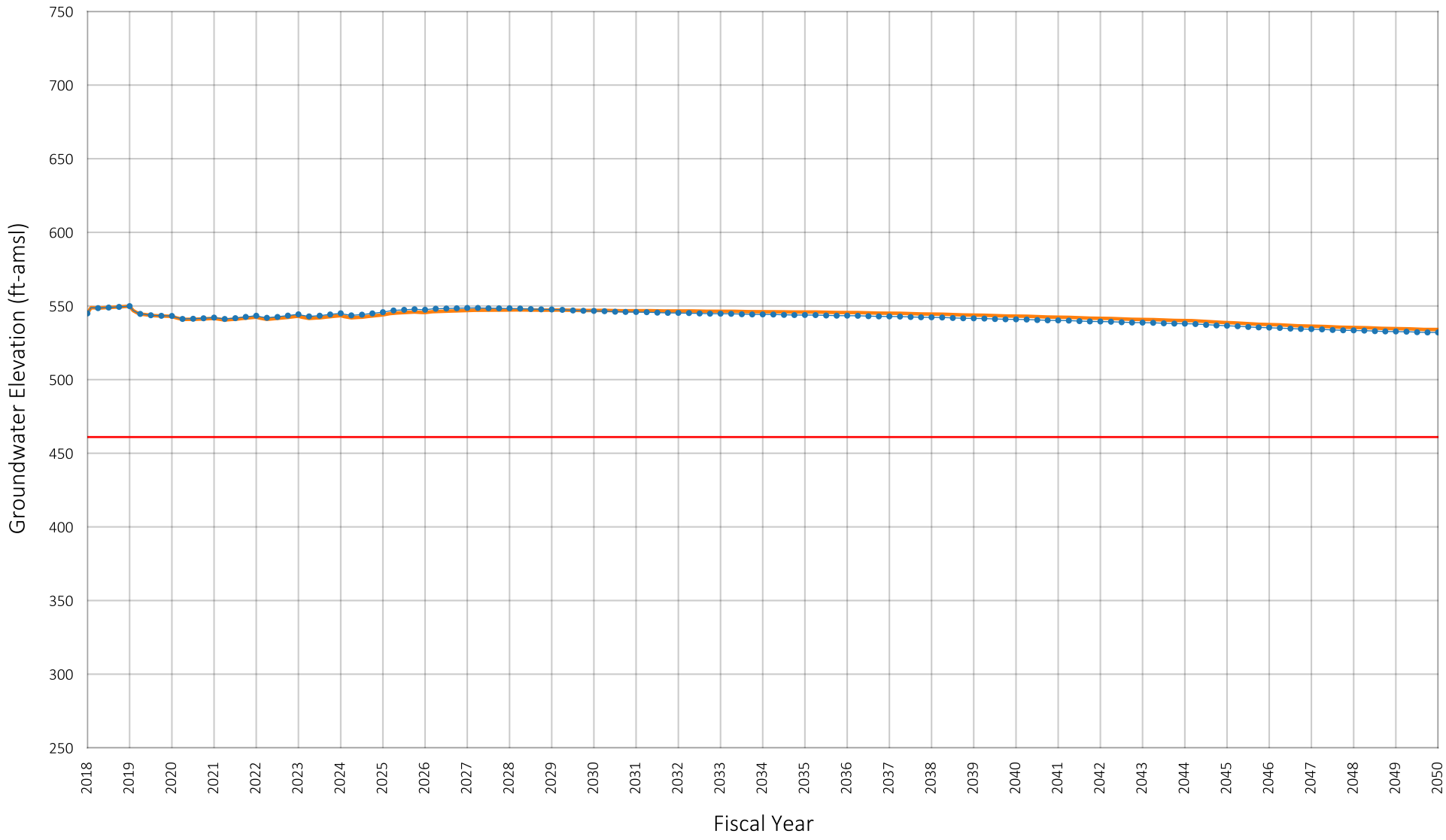
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206966
Owner: Chino Basin Desalter Authority
Well Name: II-6

Figure A-162



Location of Well in Chino Basin

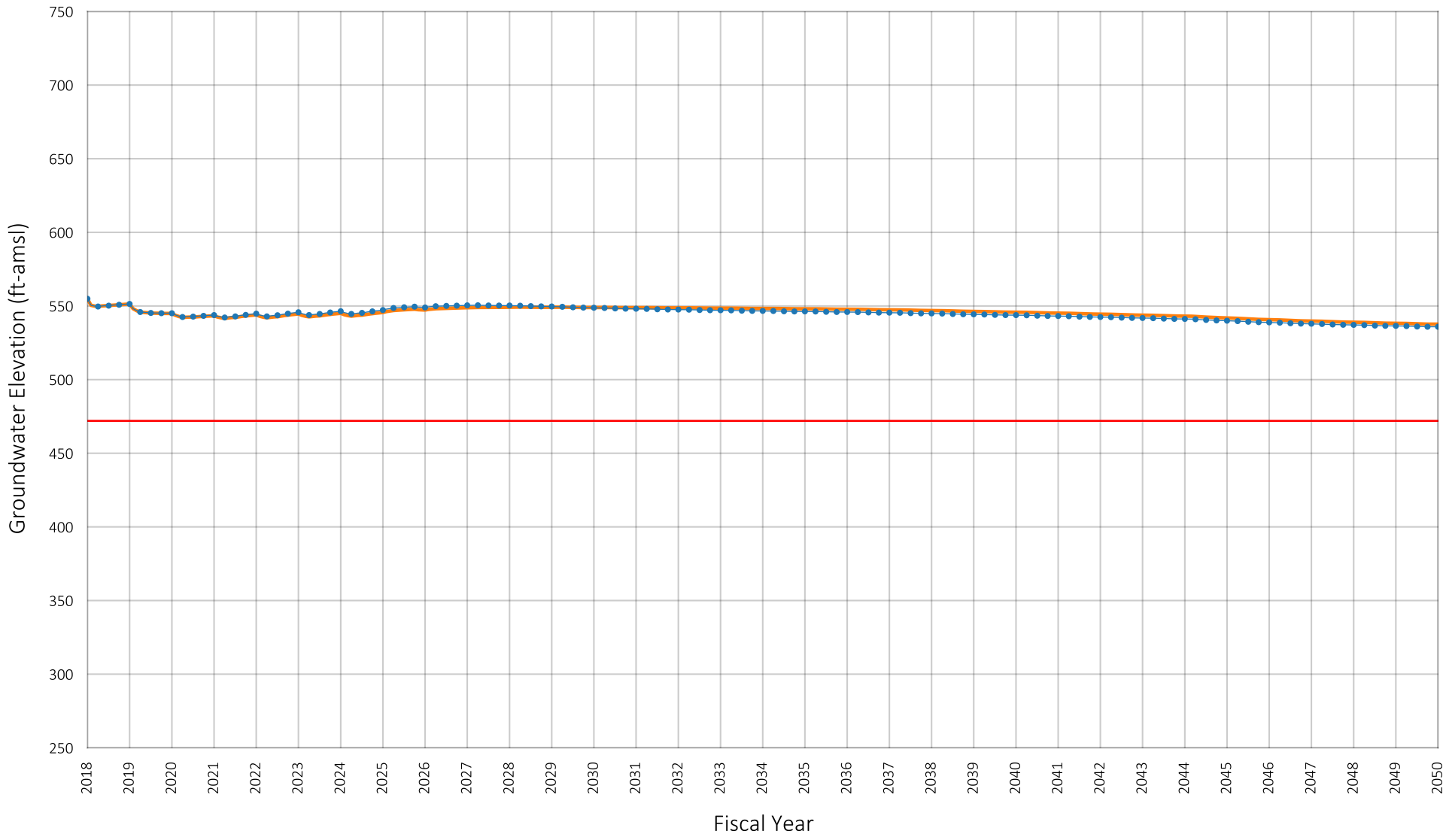
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206967
Owner: Chino Basin Desalter Authority
Well Name: II-7

Figure A-163



Location of Well in Chino Basin

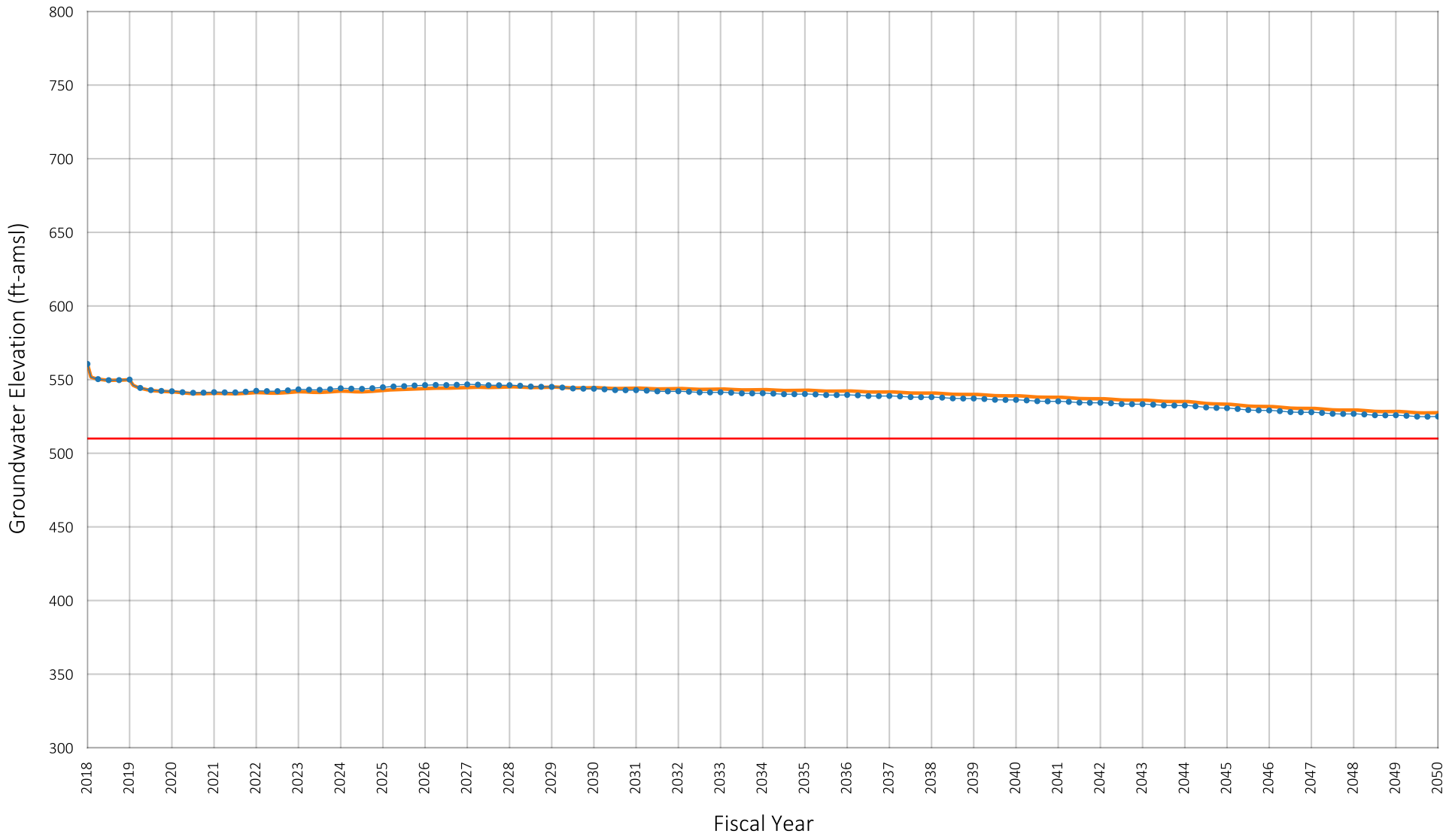
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206968
Owner: Chino Basin Desalter Authority
Well Name: II-8

Figure A-164



Location of Well in Chino Basin

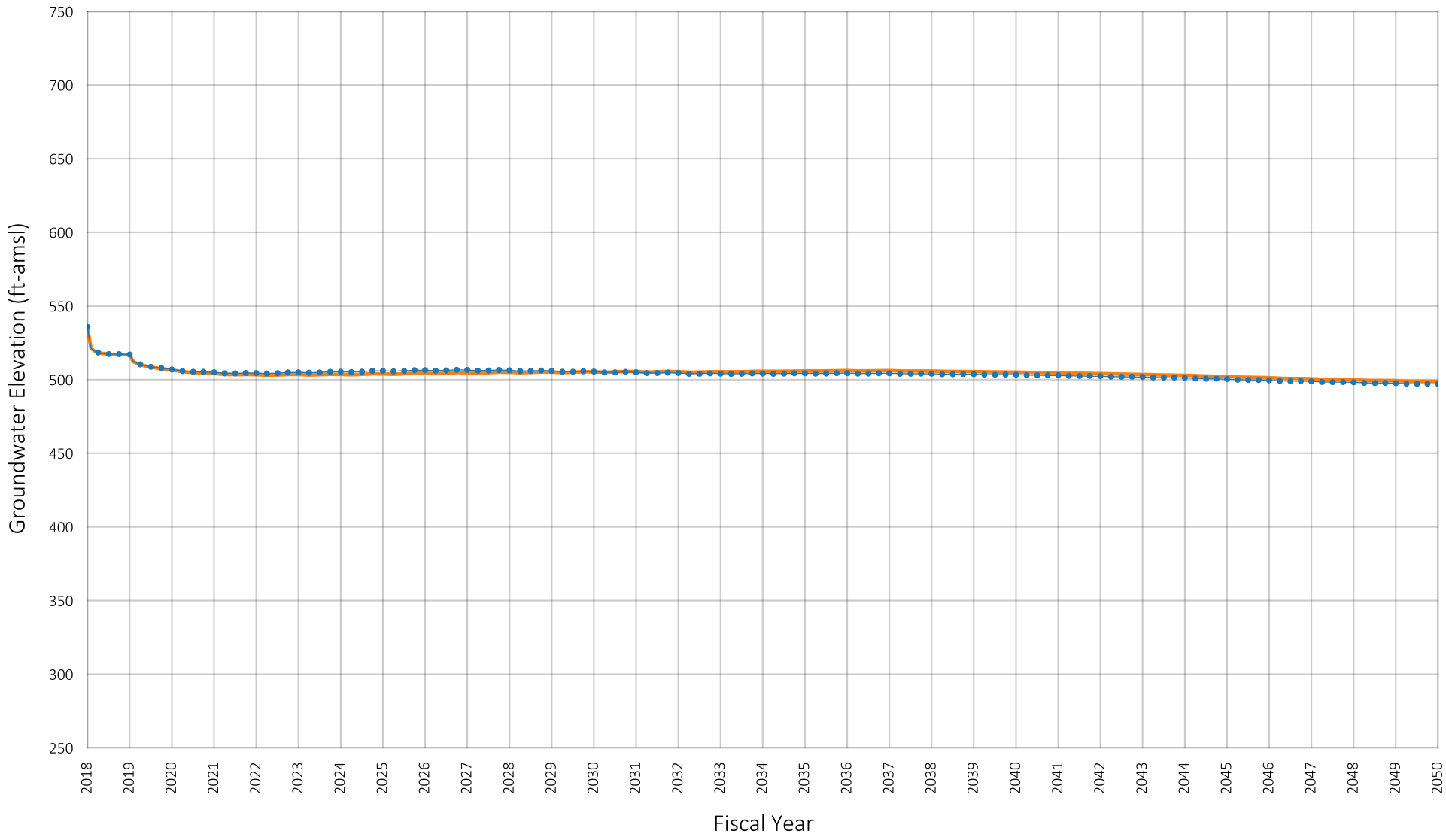
SYR1
LSLS
Pumping Sustainability Metric Elevation

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206969
Owner: Chino Basin Desalter Authority
Well Name: II-9A

Figure A-165



Location of Well in Chino Basin

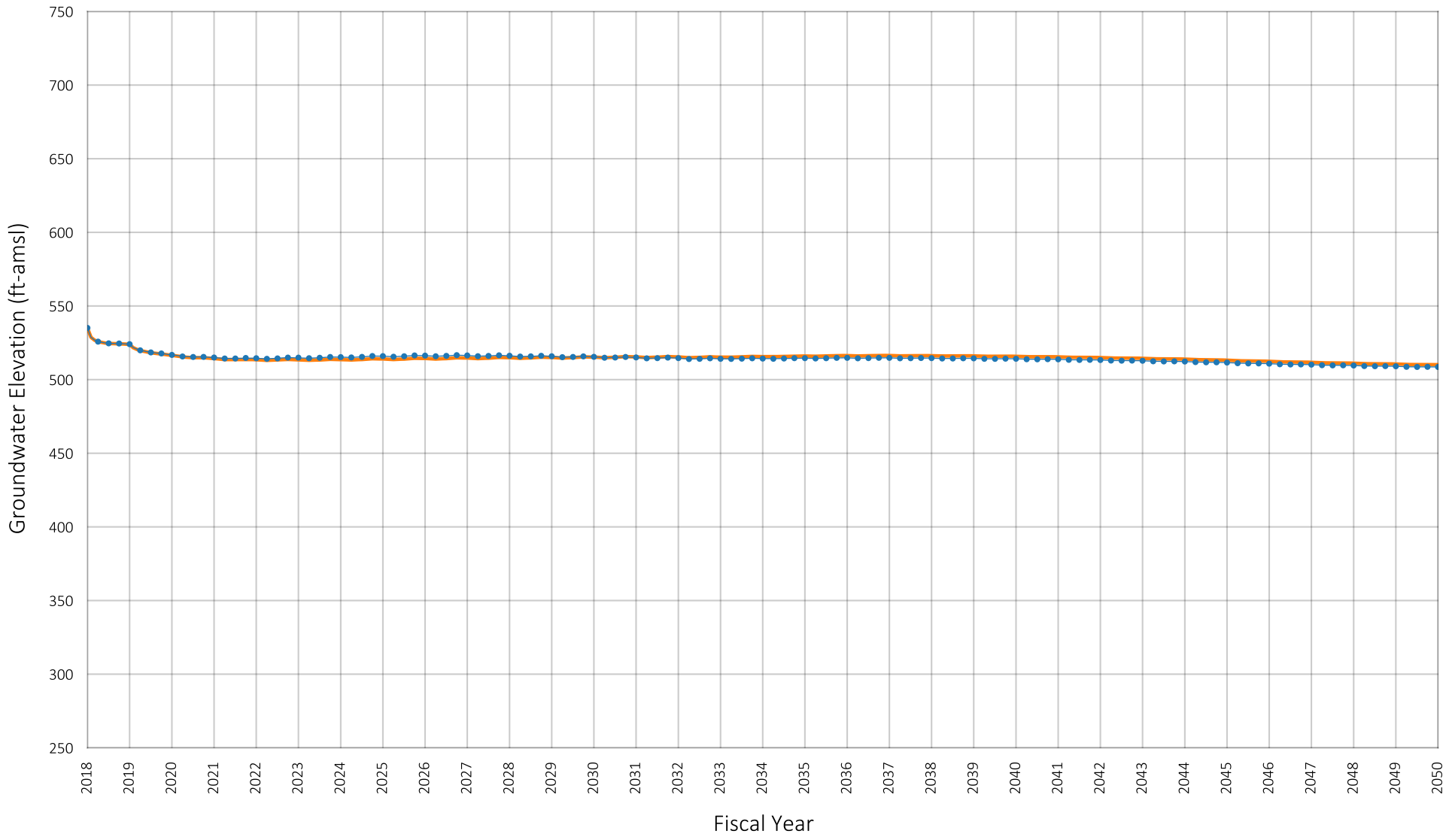
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1234064
Owner: Chino Basin Desalter Authority
Well Name: II-10

Figure A-166



Location of Well in Chino Basin

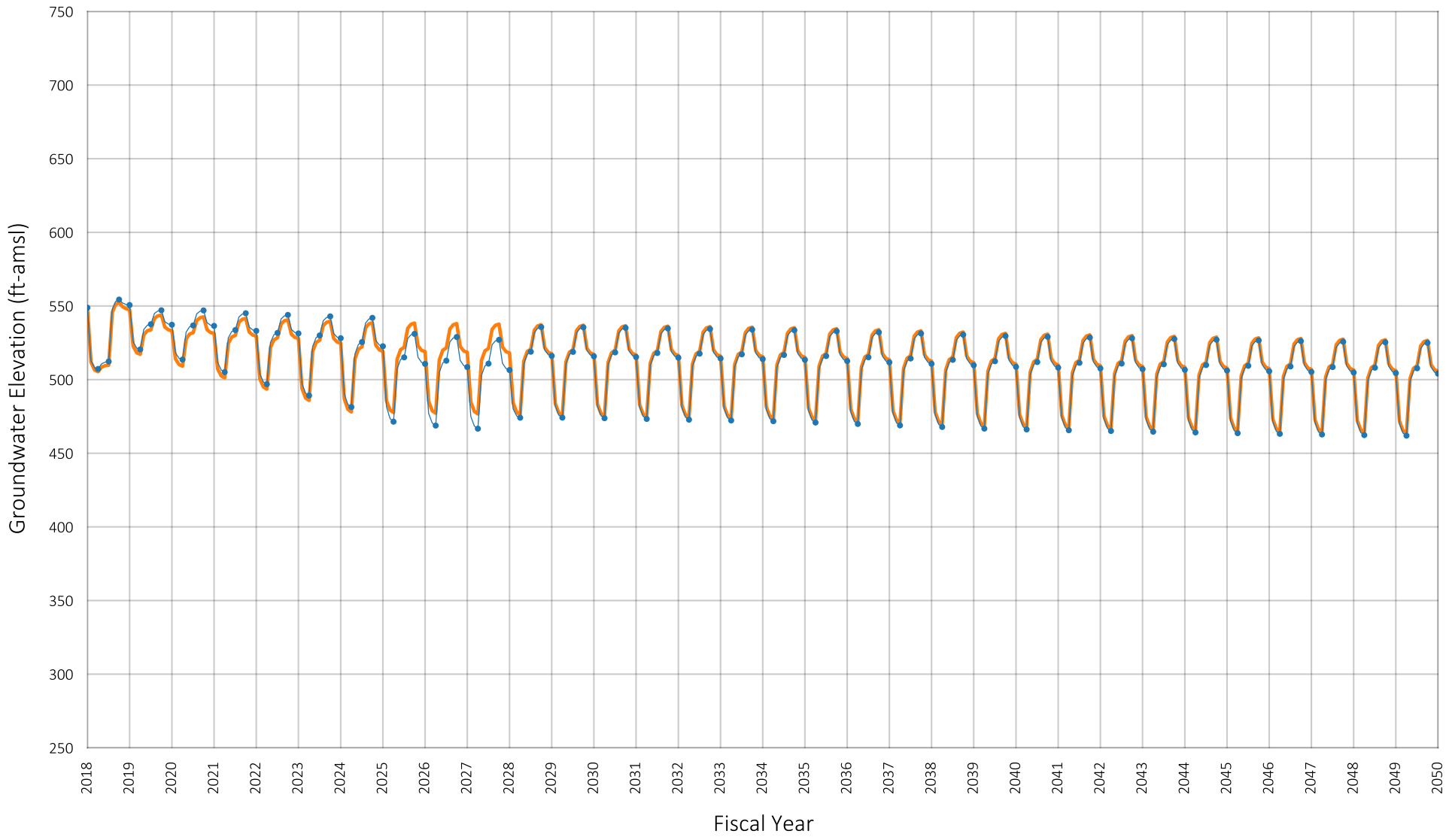
SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1234065
Owner: Chino Basin Desalter Authority
Well Name: II-11

Figure A-167



Location of Well in Chino Basin

SYR1
LSLS

Prepared by:

WEST YOST
Water. Engineered.

Projected Groundwater Elevation
Well ID#: 1206952
Owner: Chino Basin Water Master
Well Name: AP-PA/7

Figure A-168

Concord

1001 Galaxy Way, Suite 310
Concord CA 95420
925-949-5800

Davis

2020 Research Park Drive, Suite 100
Davis CA 95618
530-756-5905

Eugene

1650 W 11th Avenue, Suite 1-A
Eugene OR 97402
541-431-1280

Lake Forest

23692 Birtcher Drive
Lake Forest CA 92630
949-420-3030

Lake Oswego

5 Centerpointe Drive, Suite 130
Lake Oswego OR 97035
503-451-4500

Oceanside

804 Pier View Way, Suite 100
Oceanside CA 92054
760-795-0365

Phoenix

4505 E Chandler Boulevard, Suite 230
Phoenix AZ 85048
602-337-6110

Pleasanton

6800 Koll Center Parkway, Suite 150
Pleasanton CA 94566
925-426-2580

Sacramento

8950 Cal Center Drive, Bldg. 1, Suite 363
Sacramento CA 95826
916-306-2250

San Diego

11939 Rancho Bernardo Road, Suite 100
San Diego CA 92128
858-505-0075

Santa Rosa

2235 Mercury Way, Suite 105
Santa Rosa CA 95407
707-543-8506

WEST YOST
Water. Engineered.