

FINAL REPORT | MARCH 2024

**Water Year 2023  
Annual Report for the  
Borrego Springs Subbasin**

PREPARED FOR

Borrego Springs Watermaster

PREPARED BY



# Water Year 2023

## Annual Report for the

### Borrego Springs Subbasin

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Prepared for

## Borrego Springs Watermaster

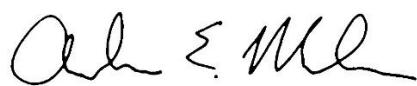
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## LIST OF ACRONYMS AND ABBREVIATIONS

AAWARE	Agricultural Alliance for Water and Resource Education
ABDSP	Anza-Borrego Desert State Park
AEM	Airborne Electromagnetic survey
af	Acre-Feet
afy	Acre-Feet Per Year
Annual Report	Annual Report for the Borrego Springs Subbasin

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Basin	Borrego Springs Groundwater Subbasin
BPA	Baseline Pumping Allocation
BSUSD	Borrego Springs Unified School District
BVHM	Borrego Valley Hydrologic Model
BWD	Borrego Water District
CA	California
CCP	Code of Civil Procedure
CCR	California Code of Regulations
cfs	cubic feet per second
CDFM	Cumulative Departure from Mean Precipitation
CIMIS	California Irrigation Management Information System Station
COC	Constituent of Concern
County	County of San Diego
CWC	California Water Code
DWR	California Department of Water Resources
\$/af	dollars per acre-foot
ET	Evapotranspiration
ETo	Reference Evapotranspiration
EWG	Environmental Working Group
FMP	Farm process
ft-amsl	feet above mean sea level
ft/yr	feet per year
GDE	Groundwater Dependent Ecosystem
GIS	Geographic Information System
GMP	Groundwater Management Plan for the Borrego Springs Groundwater Subbasin
GWMP	Groundwater Monitoring Plan
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
Judgment	Stipulated Judgment
KC	crop coefficient
MCL	maximum contaminant level
mg/L	milligrams per liter
µg/L	micrograms per liter
MNW2	Multi-Node Well package
NOAA	National Oceanic and Atmospheric Administration
PMA	Project and Management Actions
OFE	on-farm efficiency (irrigation efficiency)
QA/QC	Quality Assurance and Quality Control
RWG	Richards Watson Gershon Law
SGMA	Sustainable Groundwater Management Act

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TAC	Technical Advisory Committee
TDS	total dissolved solids
TSS	Technical Support Services
USGS	United States Geological Survey
Watermaster	Borrego Springs Watermaster
WQMP	Water Quality Monitoring Plan
WY	Water Year

# Annual Report for the Borrego Springs Subbasin

## Water Year 2023

### EXECUTIVE SUMMARY

This *Annual Report for the Borrego Springs Subbasin* (Annual Report) was prepared by the Borrego Springs Watermaster (Watermaster) for the Water Year (WY) 2023 reporting period (October 1, 2022 through September 30, 2023). The Annual Report satisfies the reporting requirements of (1) the Stipulated Judgment (Judgment) that adjudicated the groundwater rights of the Borrego Springs Subbasin (Basin) and (2) the Sustainable Groundwater Management Act (SGMA).<sup>1</sup>

On April 8, 2021, the honorable Judge Peter Wilson of the California (CA) Superior Court for the County of Orange granted the motion for entry of the Stipulated Judgment. As stated in Section II.F of the [Judgment](#)<sup>2</sup>, the Court found that the Physical Solution for the Basin, which is comprised of the Judgment and *Groundwater Management Plan for the Borrego Springs Subbasin* (GMP), is consistent with California Water Code (CWC) §10737.8 and is a prudent, legal, and durable means to achieve sustainable groundwater management within the Basin as intended by SGMA. The entry of the Judgment represents a key milestone for the Basin in achieving sustainability by 2040, as required by SGMA.

This is the third Annual Report of the Watermaster to satisfy these combined reporting requirements. Two prior annual reports were prepared and submitted to the DWR to satisfy both SGMA and Judgment requirements (West Yost, 2022a; West Yost, 2023). Two prior annual reports were prepared and submitted to the CA Department of Water Resources (DWR) to satisfy the SGMA requirements only (Dudek, 2020b; West Yost, 2021).

Since entry of the Judgment, the Watermaster has achieved the following key milestones:

- Implemented a comprehensive metering program to track pumping by all non-de minimis pumpers, including:
  - Achieved compliance with metering requirements at 98 percent of wells in the Basin.
  - Implemented a monthly meter reading program to assess seasonal pumping trends.
  - Improved understanding of pumping in the Basin such that 98 percent of the estimated total pumping in WY 2023 is based on meter read data.
- Achieved pumping reductions in excess of the Pumping Rampdown rate required by the Judgment. The pumping data show that:
  - Groundwater pumping decreased by 37 percent since the start of GMP implementation in WY 2020.
  - The total pumping by all Parties in WY 2023 was about 50 percent less than the Annual Allocation of 20,694 af, which is based on an 85% rampdown of BPA. Thus, the reduction in pumping is significantly ahead of the required Rampdown schedule.

<sup>1</sup> Judgment Section IV.E(5); California Water Code (CWC) Section (§) 10728.

<sup>2</sup> [https://borregospringswatermaster.com/wp-content/uploads/2021/06/stipulated-judgment-04-08-2021\\_bookmarked.pdf](https://borregospringswatermaster.com/wp-content/uploads/2021/06/stipulated-judgment-04-08-2021_bookmarked.pdf)

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- Performed detailed water rights accounting (by Party) for each WY since WY 2021 to document the full accounting of BPA rights, Annual Allocation, transfers of water rights, pumping, and Carryover (elections, pumping, and balances). This accounting has helped to demonstrate that features of the Judgment, such as Carryover, are being implemented as intended; and it creates transparency for the Court, Parties, and interested stakeholders.

This Annual Report is organized into six sections detailing relevant background information and activities in WY 2023. The sections are summarized below, along with certain key findings.

**Section 1 – Introduction.** This section provides background information on the Basin, Physical Solution, the Watermaster's powers and responsibilities, and how this report complies with the reporting requirements of the Judgment and SGMA.

**Section 2 – Watermaster Administrative Activities.** This section describes the Watermaster's administrative activities for the reporting period, including an overview of the Watermaster Board and Staff, meetings and Board actions, rules and regulations, Judgment amendments, and financial management (budget, audit, and grant funding).

**Section 3 – Watermaster Technical Activities.** This section describes the Watermaster's technical activities during the reporting period, including monitoring of groundwater pumping, water levels, and water quality, data management, the activities of the Technical Advisory Committee (TAC) and the Environmental Working Group (EWG), and stakeholder engagement to share technical information. Key activities during the reporting period included:

- Approved Resolution 23-02 to establish a revised comprehensive metering program.
- Approved the Groundwater Monitoring Plan for the Borrego Springs Subbasin to comply with the requirement to develop a Water Quality Monitoring Plan (WQMP) within 24 months of entry of the Judgment.
- As part of implementation of the Groundwater Monitoring Plan, Watermaster developed and implemented a public outreach effort to enhance the groundwater monitoring network and added one new well (T2 Farms Orchard well) in WY 2023 as a result of the efforts.
- Collaborated with DWR on the design and construction of two new monitoring wells (MW-6S and MW-6D) that were added to the monitoring network. The wells were constructed by DWR in Spring 2023 and funded through the Technical Support Services program.
- Completed the extension of the Borrego Valley Hydrologic Model through WY 2022 and identified improvements to be made to the model to support the recalculation of Sustainable Yield.
- Began implementing the Biological Restoration of Fallowed Lands study with DWR grant funding.

## Water Year 2023 Annual Report for the Borrego Springs Subbasin

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**Section 4 – WY 2023 Water Rights Accounting<sup>3</sup>.** This section summarizes the Watermaster's Water Rights Accounting for WY 2023. The water rights accounting is performed for each Party to the Judgment, including Parties with BPA rights and Parties with other non-De Minimis rights that are not based on BPA, specifically the Anza Borrego Desert State Park (ABDSP) and the Borrego Springs Unified School District (BSUSD). This section defines the water rights terminology, and it summarizes (by Party and in the aggregate) water rights, allowable and actual pumping, transfers and leases of BPA and Carryover, the amount of Carryover held by each BPA Party, and the Adjusted Pumping Calculation for establishing the WY 2024 Pumping Assessment. In WY 2023:

- The total pumping by all Parties in WY 2023 was 10,403.38 acre-feet (af).
  - Total pumping by BPA Parties was 10,377.03 af
  - Total pumping by ABDSP and BSUSD was 26.35 af
- Parties with BPA elected to Carryover a total of 13,825.38 af of the available unpumped Annual Allocation to WY 2024.
- The Adjusted Pumping Calculation for establishing the Pumping Assessment for WY 2024 was 17,224.95 af.
- The uniform Pumping Assessment rate for WY 2024, based on the Adjusted Pumping Calculation and budgeted WY 2024 Pumping Assessment of \$458,000, is \$26.59 per af of Adjusted Pumping in WY 2023.

**Section 5 – Borrego Springs Subbasin Hydrologic Conditions.** This section describes the current Basin conditions as of WY 2023, including climate, surface water, water use, groundwater levels, change in groundwater storage, and groundwater quality. The data and analysis in this section satisfy the reporting requirements of SGMA. The data shows that:

- Precipitation in WY 2023 was 8.55 inches, which is 2.99 inches more than the mean for the period of record. Based on the standard deviation from the mean, WY 2023 was a “normal” year. Based on the cumulative departure from mean (CDFM) precipitation, the region has been experiencing a nearly 30-year dry period since 1993, punctuated by a few wet years.
- Groundwater pumping decreased by 20 percent relative to WY 2022.
- The rate of decline in groundwater levels (e.g., feet per year [ft/yr] of decline) since GMP implementation is less than the historical rate of decline at most wells.
- The change in groundwater storage from spring 2022 to spring 2023 was approximately -1,705 af (decrease of groundwater in storage).
- The cumulative change in groundwater storage from spring 2015 to spring 2023 was approximately -45,082 af (net decrease of groundwater in storage).
- The cumulative storage change that occurred during the first four years of GMP implementation (2020-2023) was approximately -12,700 af (a net decrease of about -3,175 afy).

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<sup>3</sup> The Water Rights Accounting does not quantify or account for pumping by De Minimis pumpers.

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**Section 6 – Summary of Physical Solution Implementation Progress.** This section summarizes the key milestones accomplished since the formation of the Watermaster in March 2020 through the end of the reporting period.

As required by the Judgment Section IV.E.5, the Watermaster notified the Parties and interested stakeholders that the draft Annual Report was available for review and held a public hearing to receive comments during Watermaster's regular Board meeting on February 8, 2024 (virtual meeting). Additionally, the Watermaster accepted written comments on the draft Annual Report through February 22, 2024. This final report reflects the changes made based on the comments received. Appendix H of this Annual Report provides documentation of the comments received and how the comments were addressed by the Watermaster.

## 1.0 INTRODUCTION AND BACKGROUND

### 1.1 Purpose and Report Organization

This *Annual Report for the Borrego Springs Subbasin* (Annual Report) was prepared by the Borrego Springs Watermaster (Watermaster) to satisfy reporting requirements of (1) the Stipulated Judgment<sup>4</sup> (Judgment) that adjudicated the groundwater rights of the Borrego Springs Subbasin (Basin) and (2) the Sustainable Groundwater Management Act (SGMA)<sup>5</sup>. Figure 1 is a location map of the Basin and surrounding region. This Annual Report is intended to provide the Court with a comprehensive overview of the Watermaster's activities during Water Year (WY) 2023: October 1, 2022 through September 30, 2023.

Pursuant to Section IV.E.5 of the Judgment, the Watermaster is required to prepare and file an Annual Report with the Court not later than April 1 following the end of each WY.<sup>6</sup> Watermaster is also required to file an Annual Report with the California (CA) State Department of Water Resources (DWR) pursuant to the requirements of the SGMA, specifically Article 7, Section 356.2—Annual Reports, of the California Code of Regulations (CCR). The regulations require that an annual report be submitted to the DWR by April 1 of each year following the adoption of the Groundwater Sustainability Plan (GSP) or Alternative Plan.

This is the third Annual Report of the Watermaster to satisfy these combined reporting requirements. Two prior annual reports were prepared and submitted to the DWR to satisfy the SGMA requirements only, prior to entry of the Judgment (Dudek, 2020b; West Yost, 2021). All Annual Reports are available on the Watermaster's website at: <https://borregospringswatermaster.com/documents>.

This report is organized into the following sections:

**Section 1 – Introduction.** This section provides background information on the Basin, Judgment, Physical Solution, Watermaster, and SGMA compliance.

**Section 2 – Watermaster Administrative Activities.** This section describes the Watermaster's administrative activities for WY 2023.

**Section 3 – Watermaster Technical Activities.** This section describes the Watermaster's technical activities, including those of the Technical Advisory Committee (TAC) and the Environmental Working Group (EWG), for WY 2023.

**Section 4 – WY 2023 Water Rights Accounting.** This section summarizes the Watermaster's Water Rights Accounting for WY 2023 including: a description of the Baseline Pumping Allocation (BPA) and other non-De Minimis water rights allocated by the Judgment; reporting of aggregate pumping Parties, a record of leases and transfers of BPA and Carryover water, the amount of Carryover water held by each Party with BPA, and the Adjusted Pumping Calculation for establishing the WY 2024 Pumping Assessment to fund Watermaster operations.

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<sup>4</sup> Judgment Section IV.E.5.

<sup>5</sup> California Water Code (CWC) Section (§) 10728.

<sup>6</sup> A motion to amend the Judgment to extend the Annual Report filing deadline to April 1st was filed with the Superior Court of Orange County on January 13, 2023 and was approved at an April 20, 2023 hearing.

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**Section 5 – Borrego Springs Subbasin Hydrologic Conditions.** This section describes the current Basin conditions as of WY 2023, including climate, surface water, water use, groundwater levels, groundwater quality, and change in groundwater storage.

**Section 6 – Summary of Physical Solution Implementation Progress.** This section summarizes the key milestones accomplished by the Watermaster in implementing the Judgment as of WY 2023.

As required by the Judgment Section IV.E.5, the Watermaster notified the Parties and interested stakeholders that the draft Annual Report was available for review and held a public hearing to receive comments during Watermaster's regular Board meeting on February 8, 2024 (virtual meeting). Additionally, the Watermaster accepted written comments on the draft Annual Report through February 22, 2024. This final report reflects the changes made based on the comments received. Appendix H of this Annual Report provides documentation of the comments received and how the comments were addressed by the Watermaster.



#### Borrego Valley Groundwater Basin Subbasins

- Borrego Springs Groundwater Subbasin (7-024.01)
- Ocotillo Wells Groundwater Subbasin (7-024.02)

#### Surface Water Features

- Stream Channel
- Dry Lake



Figure 1

Prepared by:



Borrego Springs Subbasin Location Map

Borrego Springs Watermaster  
Borrego Springs Subbasin  
2023 Annual Report

## 1.2 Background and Regulatory Setting

The Basin is designated by the DWR as a critically overdrafted basin and a high priority for the development of a GSP in accordance with SGMA (CWC§ 10720-10737.8, et al). In October 2016, the County of San Diego (County) and the Borrego Water District (BWD), formed the groundwater sustainability agency (GSA) for the Borrego Valley, to address the requirement to prepare a GSP. In August 2019, the County and BWD completed a draft final GSP<sup>7</sup> in accordance with the DWR's GSP Regulations defined in the CCR Title 23, Section 350 et seq. In accordance with a Settlement Agreement amongst Basin pumbers that were responsible for over 90 percent of the groundwater pumping in the Basin (Settling Parties), the GSP was subsequently modified and repurposed as the *Groundwater Management Plan for the Borrego Springs Subbasin* (GMP) to serve as an integral part of a "Physical Solution" in a groundwater rights adjudication of the Basin. In anticipation of the adjudication action, the County withdrew from the Borrego Valley GSA effective December 31, 2019.

In January 2020, a complaint seeking a comprehensive adjudication of the groundwater rights of the Basin was filed by the BWD in the CA Superior Court for San Diego County, pursuant to Code of Civil Procedure (CCP) sections 830, et seq (*Borrego Water District v. All Persons Who Claim a Right to Extract Groundwater in the Borrego Valley Groundwater Subbasin, et al.*, San Diego Superior Court Case no. 37--2020--00005776--CU-TT-CTL). The proposed Stipulated Judgment was filed with the Court pursuant to the Settlement Agreement. Additionally in January 2020, on behalf of the Settling Parties, the BWD submitted the proposed Stipulated Judgment and GMP to the DWR as an "Alternative" to a GSP, in accordance with CWC § 10733.6 (b).

The Settlement Agreement also provided for the establishment of an Interim Borrego Springs Watermaster to assume responsibility for the sustainable management of the Basin pursuant to the terms of the proposed Stipulated Judgment until finalized by the Court. The Interim Borrego Springs Watermaster held its first meeting on March 31, 2020. On April 8, 2021, the honorable Judge Peter Wilson of the CA Superior Court for the County of Orange granted the motion for entry of the [Judgment](#)<sup>8</sup>. As stated in Section II.F of the Judgment, the Court found that the Physical Solution for the Basin, which is comprised of the Judgment and GMP<sup>9</sup>, is consistent with CWC §10737.8 and is a prudent, legal, and durable means to achieve sustainable groundwater management within the Basin as intended by SGMA. The entry of the Judgment represents the most important milestone for the Basin in achieving sustainability by 2040, as is required by SGMA for all critically over drafted basins.

The Watermaster held its first official meeting as a Court-appointed entity on April 8, 2021. In accordance with the terms of the Settlement Agreement, the BWD withdrew as the Borrego Valley GSA on June 16, 2021 and informed DWR to direct all SGMA compliance matters to the Watermaster as the primary point of contact (BWD, 2021). This action formally dissolved the Borrego Valley GSA.

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<sup>7</sup> Information regarding the GSP, including its stakeholder process, is available from the [County's website](#).

<sup>8</sup> [https://borregospringswatermaster.com/wp-content/uploads/2021/06/stipulated-judgment-04-08-2021\\_bookmarked.pdf](https://borregospringswatermaster.com/wp-content/uploads/2021/06/stipulated-judgment-04-08-2021_bookmarked.pdf)

<sup>9</sup> The GMP is included in the Judgment as Exhibit 1.

## Water Year 2023 Annual Report for the Borrego Springs Subbasin

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As part of the [Judgment Findings and Order](#)<sup>10</sup>, the Court ordered the submittal of the final approved Judgment to DWR for evaluation and assessment. On June 15, 2021, pursuant to the Court order, the Watermaster re-submitted a complete GSP Alternative submission package to the DWR documenting the Judgment's Physical Solution (including the GMP) as its Alternative to a GSP. The submission package is available for review on the [DWR's SGMA Portal](#)<sup>11</sup>. As of this writing, DWR has not completed review of the Watermaster's Alternative submission package. CWC §10733.4 requires DWR to evaluate GSPs and issue written assessments within two years of the submission date. However, there is no timeline specified in the water code regarding the timeline for review of Alternatives to GSPs.

### 1.3 Physical Solution

The Judgment, together with the GMP (included as Exhibit 1 to the Judgment), constitutes the Physical Solution for the Basin to achieve sustainable groundwater management. It serves as the technical approach for Basin management to achieve sustainability and is intended to provide flexibility and adaptability to allow the Court to use existing and future technological, social, institutional, and economic options to maximize reasonable and beneficial water use in the Basin (Judgment Section III.C).

#### 1.3.1 Stipulated Judgment

The Judgment comprehensively determined and adjudicated all groundwater rights in the Basin, whether based on appropriation, overlying right, prescriptive right, or other basis of right. It provides a Physical Solution for the perpetual management of the Basin, consistent with the objectives of SGMA and with reasonable and beneficial use under Article X, Section 2 of the California Constitution. To maintain a viable water supply for current and future beneficial uses and users of groundwater in the Basin, the sustainability goal of the Physical Solution is to ensure that by 2040, and thereafter within the planning and implementation horizon of the GMP (50 years), the Basin is operated within its Sustainable Yield and does not exhibit undesirable results as defined by CWC § 10721(x). Some of the key provisions of the Judgment are highlighted below<sup>12</sup>.

**Establishment of Pumping Rights**<sup>13</sup>. Exhibit 4 to the Judgment established a baseline water right known as BPA for each Party with BPA rights. The BPA is defined as the maximum allowed pumping quantity allocated to a Party to the Judgment (Judgment Section I.A.8) and each Party's BPA is listed in Exhibit 4 of the Judgment. Exhibit 4 is updated annually with any changes to BPA allocation based on Permanent Transfers of rights (see Section 4 and Appendix D). The total BPA is 24,293 acre-feet (af).

Starting in WY 2021, annual pumping rights of each Party, referred to as the "Annual Allocation", are limited to a percentage of the Party's BPA such that by 2040 the total Annual Allocation does not exceed the Sustainable Yield of the Basin.

The Judgment also establishes separate pumping rights for two entities—the Anza Borrego Desert State Park (ABDSP) and the Borrego Springs Unified School District (BSUSD). These pumping rights are not BPA

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<sup>10</sup> <https://borregospringswatermaster.com/wp-content/uploads/2021/04/2021-04-08-judgment-findings-and-order.pdf>

<sup>11</sup> <https://sgma.water.ca.gov/portal/alternative/print/39>

<sup>12</sup> This is not intended to be a complete list of provisions or rules of operation pursuant to the Judgment.

<sup>13</sup> See Judgment Sections I.A.8, II.G, III.A, III.D, and III.H

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rights and are not subject to pumping Rampdown or Carryover provisions (see description of these provisions below) but are subject to all other substantive provisions of the Judgment, including the requirements to meter pumping and pay pumping assessments. The combined pumping rights of these two parties is 42 af per year (afy).

The Judgment also regulates existing De Minimis pumping by any person or entity owning real property overlying the Basin, but initially finds that De Minimis pumping will not likely significantly contribute to undesirable results in the Basin. The BPA does not include the pumping rights of existing De Minimis Pumpers who produce two (2) afy or less. De Minimis pumping rights are not eligible to be transferred to another real property owned by another person. Any person or entity that seeks to initiate De Minimis pumping following entry of the Judgment must submit an [application](#)<sup>14</sup> to the Watermaster and the Watermaster will determine if the proposed De Minimis pumping will contribute to or threaten to contribute to undesirable results. The application will be denied if the Watermaster Board finds that the new De Minimis pumping will contribute to or threaten to contribute to undesirable results. To the extent that the Court determines that De Minimis pumping (existing and/or new) has significantly contributed to or threatens to significantly contribute to undesirable results, the Court may regulate De Minimis pumping as deemed prudent (Judgment Section III.H).

**Determination of Sustainable Yield**<sup>15</sup>. Sustainable Yield is defined as the maximum quantity of water that can be cumulatively pumped on an annual basis from the Basin without causing an undesirable result, consistent with SGMA (CWC § 10721(w)). The initial Sustainable Yield of the Basin is set at 5,700 afy for the first five-year period of implementation (WY 2021 through WY 2025). The Sustainable Yield was calculated over a base period representative of long-term conditions in the Basin. A refined and specific estimate of the Sustainable Yield will be determined by the Watermaster every five years through 2035, as specified in Section III.F of the Judgment. The schedule for redetermining the Sustainable Yield is as follows:

- By January 1, 2025 – Establish the Sustainable Yield for the Second Five-Year Period of WY 2026 through WY 2030.
- By January 1, 2030 – Establish the Sustainable Yield for the Third Five-Year Period of WY 2031 through WY 2035.
- By January 1, 2035 – Establish the Sustainable Yield for the Fourth Five-Year Period of WY 2036 through WY 2040.

Future Sustainable Yield estimates will be made using the best available records and data, and sound scientific and engineering methods. The redetermined Sustainable Yield will consider all sources of replenishment, including return flows and underflows, and all outflows from the Basin, and will consider, among other data, information derived from updated runs of the Borrego Valley Hydrologic Model (BVHM). After input and recommendation from the TAC, the Watermaster will revise the determination of Sustainable Yield.

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<sup>14</sup><https://borregospringswatermaster.com/wp-content/uploads/2023/01/Application-for-New-De-Min-Pumping.pdf>

<sup>15</sup> See Judgment Sections I.A.57, II.E, III.F, and IV.G

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**Pumping Rampdown Schedule<sup>16</sup>.** Rampdown is defined as the reduction in cumulative authorized pumping of BPA imposed pursuant to the terms of the Judgment to alleviate the Overdraft of the Basin and achieve Sustainable Groundwater Management and the reasonable and beneficial use of the Basin's water resources. To ensure that the Annual Allocation does not exceed the Sustainable Yield of the Basin by 2040, the Judgment provides for an annual Rampdown schedule for Parties with BPA. The Rampdown amount is intended to be adjusted, as necessary, after each scheduled update of the Sustainable Yield estimate goes into effect (e.g., WY 2026, WY 2031, and WY 2036).

The initial Rampdown schedule provides for a five percent annual reduction in pumping relative to the BPA for the first five years, such that in WY 2025 the Annual Allocation is 75 percent of BPA. If the estimate of Sustainable Yield does not change after the first redetermination is completed in WY 2025, the Rampdown will continue at a rate of five percent per year, such that by WY 2030 the annual pumping allocation is 50 percent of BPA (about two-thirds of the total Rampdown required if the Sustainable Yield is 5,700 afy). If the revised estimate of Sustainable Yield falls below or exceeds the initial 5,700 afy estimate, the annual Rampdown Rate for the subsequent five-year period will be reduced or increased proportional to the change in the Sustainable Yield so that by WY 2030, two-thirds of the total Rampdown required to meet the sustainability goal by 2040 will be achieved. More specifically, under the Judgment, the "Annual Rampdown Rate for each Water Year of the Third Five-Year Period will be calculated to reduce the then cumulative allowed pumping (i.e., cumulative Annual Allocation in effect for Water Year 2029-2030) over 10 years to equal the revised determination of Sustainable Yield by Water Year 2039-2040. Thus, the annual Rampdown Rate will be established by dividing the necessary ten-year cumulative Rampdown by ten." (Judgment Section III.F.8) That is, the annual Rampdown Rate of the pumping allocation in the final ten years of the Physical Solution implementation period will be set to 2.5 percent per year if the Sustainable Yield is 5,700 afy or will be reduced or increased proportional to the change in the Sustainable Yield so that by WY 2040, the total pumping allocation equals the Sustainable Yield. Thus, if the Sustainable Yield were to remain at 5,700 afy, the annual pumping allocation would be ramped down by over 75 percent in 20 years.

**Allowance for Carryover<sup>17</sup>.** The Judgment allows for a Party's unused Annual Allocation to be carried over for use in subsequent water years, subject to certain restrictions defined in Section III.B of the Judgment. Initially, the maximum quantity of Carryover that a Party can accrue is two times the amount of the Party's BPA (2x BPA). Carryover is subject to periodic review and adjustment by the Watermaster to prevent undesirable results. The first prescribed review of Carryover will be completed by January 1, 2025 as part of the process to redetermine the Sustainable Yield. The rights of the ABDSP and BSUSD are not eligible for Carryover.

**Allowance for Leases and Transfers of BPA<sup>18</sup>.** In the interest of advancing the effective and efficient management of the Basin, all BPA may be permanently transferred or leased, subject to the procedures and limitations defined in the Judgment.

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<sup>16</sup> See Judgment Sections I.A.5, III.E, and III.F

<sup>17</sup> See Judgment Sections I.A.12, III.B, and IV.E.4

<sup>18</sup> See Judgment Sections III.I and III.J

**Remedies and Penalties for Overproduction**<sup>19</sup>. The Judgment provides remedies for Overproduction of annual pumping limits and provides Watermaster the authority to establish penalty assessments for Overproduction.

**Fallowing Standards**<sup>20</sup>. To ensure that the permanent fallowing of irrigated crops in furtherance of achieving groundwater sustainability does not result in blight, reduced air quality, or other public health impacts associated with wind-blown dust, the Judgment establishes minimum fallowing standards that must be met in order to permanently transfer all or a portion of the BPA associated with the fallowed land to another Party. Fallowing standards may also be applicable to multi-year leases, per Judgment Section III.J.3.

### **1.3.2 Groundwater Management Plan**

The GMP document includes the scientific and other background information about the Basin required by SGMA and its implementing regulations. It describes the Basin, historical groundwater conditions and trends, the initial estimate of Sustainable Yield of 5,700 afy, the sustainable management criteria (e.g., sustainability indicators, Minimum Thresholds, and Measurable Objectives), the groundwater level and groundwater-quality monitoring program to be used to track progress over time, and Projects and Management Actions (PMAs) to achieve sustainability. The GMP's initial estimate of Sustainable Yield, sustainable management criteria, management areas, monitoring program, and PMAs will be assessed, and refined, if necessary, on the schedule required by the DWR and Court through the TAC process defined in the Judgment.

#### **1.3.2.1 Overview of Sustainable Management Criteria**

The Sustainability Goal defined in the GMP is to ensure that by 2040 the Basin is operated within its Sustainable Yield without causing Undesirable Results. The main Undesirable Results to be avoided are the significant and unreasonable occurrences of the following Sustainability Indicators: chronic lowering of groundwater levels; reductions in groundwater storage; and degradation of groundwater quality.

The GMP included initial sustainable management criteria, including Minimum Thresholds and Measurable Objectives, for the sustainability indicators determined to be a current and/or potential future undesirable result of groundwater management. The sustainable management criteria defined in the GMP, and that informed the elements of the Physical Solution of the Judgment described in Section 1.3.1 of this Annual Report, are summarized below.

**Reduction of Groundwater in Storage.** The sustainability goal of the Physical Solution is to halt the overdraft condition in the Basin by bringing the groundwater pumping in balance with the Sustainable Yield by 2040. This goal will be accomplished through implementation of a Pumping Rampdown and progress is monitored by metering all pumping by Parties with BPA and implementing the groundwater level monitoring program. Pumping and groundwater levels, along with other data, will be used to refine the estimate of the Sustainable Yield every five years through 2035. This work will also include assessments of the change in groundwater storage over time.

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<sup>19</sup> See Judgment Sections III.G and V.2

<sup>20</sup> See Judgment Section III.J

**Chronic Lowering of Groundwater Levels.** The sustainability goal is to stabilize groundwater levels to ensure groundwater is maintained at adequate levels, as defined at specific wells (Representative Monitoring Wells). Progress in achieving this goal through pumping Rampdown and other means will be assessed by comparing observed groundwater levels to historical trends, Interim Milestones, Minimum Thresholds, Measurable Objectives, and projections from the BVHM.

**Degraded Water Quality.** The sustainability goals for water quality are for (1) the potable water supply to continue to meet California Title 22 drinking water standards and (2) the non-potable irrigation supply to be suitable for agricultural and recreational uses. Progress in achieving this goal will be assessed by monitoring groundwater quality through Physical Solution implementation.

### 1.3.2.2 Overview of GMP Projects and Management Actions

The technical information in the GMP informed the elements of the Physical Solution of the Judgment described in Section 1.3.1 of this Annual Report. The primary management tool to eliminate overdraft is to Rampdown pumping to a level that does not exceed the Basin's estimated Sustainable Yield by 2040 – a Rampdown that will be on the order of a 75 percent reduction in pumping relative to pre-SGMA conditions. As previously described, the Physical Solution for the Basin consists of the Judgment and the GMP. The Judgment must be considered together with the GMP in describing PMAs. The provisions of the Judgment control over and supersede any contrary provisions contained in the GMP (Judgment Section A, p. 5). Six PMAs are described in the GMP and the Judgment contains provisions that directly implement or indirectly support the intent of the PMAs. The PMAs listed in the GMP include:

**PMA No. 1 – Water Trading Program.** The intent of the water trading program is to create a mechanism for Parties to lease and transfer the water rights needed to maintain economic activities in the Basin and facilitate adjustment to the required Rampdown. The Judgment directly implements this PMA by authorizing and defining procedures for the transfer and lease of BPA, pumping allocations, and Carryover. The relevant procedures are specified in Sections III.I and III.J. The Watermaster maintains documentation of all transfers and reviews each transaction to address consistency with the Judgment.

**PMA No. 2 – Water Conservation Program.** The Water Conservation Program described in the GMP would consist of separate programmatic components to evaluate and advance water conservation for the three primary water use sectors in the Basin: agricultural, municipal, and recreation. The ability to implement a programmatic water conservation program will be highly dependent upon securing funding, such as through grants and low interest loan programs. Regardless of the Watermaster's (or any Pumper's) ability to secure funding to implement this PMA, the Judgment requires Rampdown of pumping by all BPA Parties.

**PMA No. 3 – Pumping Reduction Program.** Reduction of pumping is the primary tool of the Physical Solution to achieve sustainability. As described in Section 1.3.1, the Judgment directly implements this PMA through the Rampdown provisions, which includes implementation and enforcement processes and provide for the periodic re-evaluation of the Sustainable Yield. Under the Rampdown, except for the water allocations for the ABDSP and BSUSD, each BPA Party's Annual Allocation is reduced incrementally such that the total extraction from the Basin by 2040 will equal the then-current estimate of Sustainable Yield. The implementation and enforcement mechanisms defined in the Judgement include mandatory water metering and reporting for all non-De Minimis groundwater users.

**PMA No. 4 – Voluntary Fallowing of Agricultural Land.** The intent of the voluntary fallowing program is to create a mechanism to facilitate the responsible conversion of high water use irrigated agriculture to lower water use open space, public land, or other development. The Judgment specifies minimum fallowing standards that must be implemented in connection with the permanent transfers of BPA or long-term leases of BPA that result in fallowing of agricultural land (Judgment Section III.J and Exhibit 3).

**PMA No. 5 – Water Quality Optimization.** The intent of the Water Quality Optimization program would be to identify as-needed direct and indirect treatment options for BWD and other Pumpers to optimize groundwater quality and its use and minimize the need for expensive water treatment to meet drinking water standards. The Judgment provides that Watermaster will (1) implement a groundwater quality monitoring program to support characterization of water quality and trends over time and (2) determine if changes in water quality are significant and unreasonable following consideration of the cause of impact, the affected beneficial use, potential remedies, input from the TAC, and subject to approval by the Court exercising independent judgment (Judgment Section VI.B.2).

**PMA No. 6 – Intra-Subbasin Water Transfers.** The purpose of an intra-subbasin transfer program would be to physically mitigate existing and future reductions in groundwater storage and groundwater quality impairment through pumping optimization and conveyance. Under Section III.I.5 of the Judgment, in order to protect the Basin against Undesirable Results, the Watermaster, with input from the TAC, may restrict Permanent Transfers and Leases to specific areas of the Basin based on reasonable, evidence-based concern that a Permanent Transfer or Lease will cause or exacerbate Undesirable Results, and then only in a manner that is equitable to all affected Pumpers.

## 1.4 Watermaster Powers and Responsibilities

To assist the Court in the Administration of the Judgment, the Court established the Borrego Springs Watermaster. The Watermaster is charged with administering and enforcing the provisions of the Judgment, including implementation of the Physical Solution, and any other instructions or orders of the Court. The specific powers, authorities, and duties of the Watermaster are defined in the Judgment. The Watermaster must carry out its duties, powers, and responsibilities in an impartial manner without favor or prejudice to any Pumper, Party, Management Area, or purpose of use.

The Watermaster is comprised of a Board of five members representing the following interests in the Basin—municipal (BWD), agricultural, recreational, community, and the County—and may hire employees or contractors, as needed, to enable administration of the Judgment. The Watermaster operates pursuant to the Rules and Regulations, attached as Exhibit 5 to the Judgment, and which may be amended by Supermajority Vote following a public hearing (Judgment Section IV.D).

The following are some of the key responsibilities of the Watermaster in administering the Judgment<sup>21</sup>:

- **Establish an Annual Budget.** The Watermaster must approve an annual budget that defines the operating and capital expenses required to administer the Judgment. The budget must also define the revenues and cash reserves that will be collected or used to fund the budget. Section IV.E.3 of the Judgment defines a detailed process and schedule for developing the annual budget and collecting pumping assessments to fund the budget. The Judgment also

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<sup>21</sup> This is not intended to be a complete list of duties or responsibilities pursuant to the Judgment.

defines a separate process and schedule (Judgment Section III.F) by which the TAC advises the Watermaster on the scope of work and budget for technical work specific to redetermination of the Sustainable Yield.

- **Levy Pumping Assessments.** The annual Watermaster Budget costs in excess of loans, grants, and available Overproduction Penalty assessments funds are funded by a uniform pumping assessment, expressed as a cost in dollars per af (\$/af) and each Party's assessment is based on their annual Adjusted Pumping Calculation (see Section 4 of this Report for details). Assessments are collected in two installment payments each WY in December and June.
- **Metering and Pumping Reports.** Watermaster is responsible for collecting data from the Parties to track groundwater pumping and annually verify that pumping meters meet the accuracy standards defined in Article V of the Rules and Regulations. Section VI.A of the Judgment specifies the well metering requirements of the Parties. Watermaster develops and periodically adapts the meter reporting frequency and schedule in consultation with the TAC to ensure data is sufficient to support calculations of Sustainable Yield.
- **Water Rights Accounting.** Watermaster is responsible for performing water rights accounting on an annual basis to track pumping, Carryover elections, transfers, and leases between the Parties, and to calculate (1) the Adjusted Pumping Calculation on which assessments for the ensuing year are based and (2) the total allowable pumping by Party for the ensuing year. Section IV.E.4 of the Judgment defines the process to compute the Adjusted Pumping Calculation (see Section 4 of this Report for details).
- **Monitoring Programs.** Watermaster is responsible for implementing monitoring programs and collecting data from the Parties that enable the annual reporting of Basin conditions to the DWR pursuant to SGMA, to support the periodic recalculation of Sustainable Yield, and to support the periodic update of the GMP<sup>22</sup>. Section IV.B of the Judgment provides for a schedule and process to establish a water quality monitoring plan.
- **Unauthorized Pumping.** The Watermaster shall undertake any action, including bringing any motion to the Court, necessary to halt unauthorized pumping.
- **Meetings with the Technical Advisory Committee.** The TAC is the advisory body established pursuant to Section IV.G.I of the Judgment to study technical aspects of the Basin and to issue recommendations to Watermaster based on such technical study for the purpose of achieving Sustainable Groundwater Management in the Basin in an effective and efficient manner, consistent with the rights and obligations of the Parties established by the

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<sup>22</sup> SGMA requires that GSPs and Alternative Plans be updated every five years. Per DWR: "Agencies with approved alternatives are also required to submit the alternative every five years and whenever the alternative is amended, and to provide a written assessment to the Department. The written assessment must describe whether implementation of the alternative, including implementation of projects and management actions, is meeting the sustainability goal in the basin, and shall include detailed information as stated in 23 CCR §356.4. The five-year update should show how a local agency is addressing any recommended actions identified in the Department's written assessment of the alternative."

<https://water.ca.gov/Programs/Groundwater%20Management/SGMA-Groundwater-Management/Alternatives>,  
accessed November 22, 2023.

Judgment. The Judgment defines the role of the TAC in advising the Watermaster and the process for striving for consensus recommendations. The Watermaster is responsible to convene the TAC at least twice per year to review Watermaster activities pursuant to this Judgment and to receive advisory recommendations.

- **Establishment of Environmental Working Group.** Per the Judgment, the Watermaster has established an EWG to advise the Watermaster on groundwater dependent ecosystems (GDE) and any other matters approved by the Watermaster. An EWG budget, which shall be adequate for the EWG to carry out its responsibilities as directed by the Watermaster, will be included in the Watermaster's annual budget.
- **Annual Report.** Watermaster is responsible for preparing an annual report to the Court.

## **1.5 Annual Reporting Compliance**

### ***1.5.1 Judgment Compliance***

Section IV.E.5 of the Judgment defines the minimum reporting requirements to the Court. Table 1 is a reference guide that illustrates where each of the required annual reporting elements can be found within this report.

### ***1.5.2 Sustainable Groundwater Management Act Compliance***

SGMA regulations require that an annual report be submitted to the DWR by April 1 of each year following the adoption of the GSP or Alternative Plan. This Annual Report provides the Basin conditions update as of WY 2023 (October 1, 2022 through September 30, 2023). Table 2 is a reference guide that illustrates where each of the required annual reporting elements described in CCR Article 7, Section 356.2 can be found within this report.

**Table 1. Judgment Requirements Guide Map for the Borrego Springs Subbasin WY 2023 Annual Report**

Judgment Requirement	Section(s) and page number(s) in the Annual Report
Annual fiscal report of the operation of Watermaster during the preceding Water Year	Section 2.9.2 – Water Year 2023 Budget Status and Annual Audit: Pages 24-26
Audit of all assessments and expenditures by Watermaster	Appendix B – WY 2023 Financial Audit
Summary of the management of the Basin and Watermaster activities pursuant to the Judgment	Section 2 – Watermaster Administrative Activities: Pages 19-28 Section 3 – Watermaster Technical Activities: Pages 29-49 Section 6 – Summary of Physical Solution Implementation Progress: Pages 119-121 Appendix A - Watermaster Board Motions – WY 2023
Summary of aggregate pumping	Section 4.3 – Adjusted Pumping Calculation for WY 2023: Pages 54-60
Record of Leases and Permanent Transfers of BPA and the amount of Carryover held by each Party	Section 4.2 - Permanent Transfers and Leases: Pages 52-54 Section 4.3 – Adjusted Pumping Calculation for WY 2023: Pages 54-60
Any recommendations to the Court concerning further orders to advance the management of the Basin	No recommendations to the Court are made in this Annual Report. Section 2.8 reports on Judgment amendments recommended by the Board during WY 2023 (Page 22).
DWR reporting requirements to satisfy SGMA	Table 2. Alternative Annual Report Elements Guide Map for the Borrego Springs Subbasin WY 2023 Annual Report: Page 18

**Table 2. Alternative Annual Report Elements Guide Map for the Borrego Springs Subbasin WY 2023 Annual Report**

CCR – GSP Regulation Sections	Alternative Elements	Document which section(s), page number(s), or briefly describe why that Alternative element does not apply to the entity.
<b>Article 7</b>	<b>Annual Reports and Periodic Evaluations by the Agency</b>	
<b>§ 356.2</b>	<b>Annual Reports</b>	
Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:		
(a)	General information, including an executive summary and a location map depicting the basin covered by the report.	Executive Summary: Pages 1-4 Section 1 – Introduction and Background: Pages 5-18 Borrego Springs Groundwater Subbasin Location: Figure 1 (Page 7)
(b)	A detailed description and graphical representation of the following conditions of the basin managed in the Plan:	Section 5 – Borrego Springs Subbasin Hydrogeologic Conditions: Pages 62-120
(1)	Groundwater elevation data from monitoring wells identified in the monitoring network shall be analyzed and displayed as follows:	
(A)	Groundwater elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.	Spring 2023 contours: Figure 10 (Page 81) Fall 2023 contours: Figure 11 (Page 82)
(B)	Hydrographs of groundwater elevations and water year type using historical data to the greatest extent available, including from January 1, 2015, to current reporting year.	Time History of Groundwater Levels for Selected Wells: Figure 9 (Page 80) Historical groundwater elevation time-series for Representative Monitoring Wells: Figures 12a-12p (Pages 85-100) Appendix F – Groundwater level hydrographs for all monitoring wells for period of 1950 to 2023
(2)	Groundwater extraction for the preceding water year. Data shall be collected using the best available measurement methods and shall be presented in a table that summarizes groundwater extractions by water use sector, and identifies the method of measurement (direct or estimate) and accuracy of measurements, and a map that illustrates the general location and volume of groundwater extractions.	Section 5.4.1: Groundwater Pumping: Pages 71-102 General groundwater extraction locations/volumes: Figure 7 (Page 75) Groundwater Pumping by Sector 2015 to 2023: Table 18 (Page 77)
(3)	Surface water supply used or available for use, for groundwater recharge or in-lieu use shall be reported based on quantitative data that describes the annual volume and sources for the preceding water year.	Section 5.4.2 - Surface Water Use: Page 78
(4)	Total water use shall be collected using the best available measurement methods and shall be reported in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements. Existing water use data from the most recent Urban Water Management Plans or Agricultural Water Management Plans within the basin may be used, as long as the data are reported by water year.	Section 5.4.3 - Total Water Use: Page 78
(5)	Change in groundwater in storage shall include the following:	Section 5.5.2 - Change in Groundwater Storage: Pages 103-113
(A)	Change in groundwater in storage maps for each principal aquifer in the basin.	Change in Groundwater Storage Spring 2022 to Spring 2023: Figure 16 (Page 110)
(B)	A graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for the basin based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year.	Annual and Cumulative Change in Groundwater Storage: Table 21 (Page 111) Annual Groundwater Extractions and Change in Groundwater Storage – 2015 to 2023: Figure 17 (Page 112)
(c)	A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.	Section 6: Physical Solution Implementation Progress: Pages 121-123

## 2.0 WATERMASTER ADMINISTRATIVE ACTIVITIES

Watermaster conducts business and reports on its business and finances on a WY basis. This report summarizes the Watermaster's administrative activities for WY 2023: October 1, 2022 through September 30, 2023.

### 2.1 Watermaster Board

The Watermaster Board is comprised of five members, with each member having one vote. The membership of the Board is comprised of one representative and one alternate representing the municipal sector (BWD), the agricultural sector, the recreational sector, the public/community, and the County. The Parties within the respective agricultural and recreational sectors, and the process for selecting the respective agricultural, recreational, and public/community representatives are described in Exhibit 7 of the Judgment. The Board was comprised of the representatives and Board officer appointments during the reporting period, as listed in Table 3.

**Table 3. Borrego Springs Watermaster Board Representatives and Officers in WY 2023**

Entity/Sector	Board Representative	Board Alternate	Appointment
Borrego Water District	Dave Duncan	Kathy Dice	Chairperson
Recreational Sector	Shannon Smith	Rich Pinel	Vice Chairperson Treasurer Secretary
Agricultural Sector	Tyler Bilyk	Mike Soley	
Community Representative	Mark Jorgensen	Martha Deichler (Oct – Jun) Jim Dax (Jun – Sep)	
County of San Diego	Jim Bennet, PG, CHG	Leanne Crow, PG	

### 2.2 Watermaster Staff

The Watermaster may hire employees or contractors, as needed, to enable administration of the Judgment. Section IV.C of the Judgment describes the specific process the Board must follow in hiring staff to avoid a potential conflict of interest. Any technical advisor, attorney, executive director, or similar employee or contractor performing services that concern technical or policy matters of the Watermaster must be independent (not under contract with any Party) and selected by the Watermaster through an arms-length request for proposal process unless otherwise agreed by a Supermajority Vote of the Board. These procedures were followed to establish Watermaster's current staff.

**Legal Counsel.** In July 2020, the Watermaster contracted with James M. Markman of Richards, Watson & Gershon (RWG Law) to serve as legal counsel. Attorneys at RWG Law support Mr. Markman, as needed.

**Executive Director and Technical Services.** In August 2020, the Watermaster contracted with West Yost<sup>23</sup> to retain Samantha Adams as the Executive Director and Andy Malone, PG as the Lead Technical Consultant. Ms. Adams and Mr. Malone are supported by West Yost financial, administrative, and technical staff in the performance of their administrative and technical duties, as needed. The contract

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<sup>23</sup> The contract was originally executed with Wildermuth Environmental Inc., who was later acquired by West Yost on November 9, 2020.

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was established for an initial 2.5-year period, with an expiration date of December 31, 2022. In WY 2023, Watermaster amended the contract to extend the contract expiration date through December 31, 2025.

### 2.3 Watermaster Contact Information and Website

Correspondence and inquiries regarding meetings or other Watermaster business can be sent to Watermaster via email at [borregospringswm@westyost.com](mailto:borregospringswm@westyost.com) or via regular mail to:

Borrego Springs Watermaster  
c/o West Yost  
23692 Birtcher Drive  
Lake Forest, CA 92630  
(949) 420-3030

The Watermaster maintains a website to keep the Parties and public informed about its activities and to provide other important forms, documents, and information associated with the administration of the Judgment. The website address is: <https://borregospringswatermaster.com>.

### 2.4 Watermaster Service and Distribution Lists

Watermaster notifies Parties and interested stakeholders of its activities and actions through maintenance and use of two notice lists: a Court Service List and an Email Distribution List.

The Court Service List contains the contact information for all Parties in the case that resulted in the Stipulated Judgment (*Borrego Water District v. All Persons Who Claim a Right to Extract Groundwater in the Borrego Valley Groundwater Subbasin, et al.*, San Diego Superior Court Case No. 37-2020-00005776). The Court Service List is used to provide Parties with electronic copies of all documents filed with the Court, including notices and motions filed by a party or the Watermaster, and Court orders. The Court Service List is maintained by Legal Counsel. To be added or removed from the Email Distribution List, a Party must notify the Court and other Parties and file a Form MC-040<sup>24</sup>, “Notice of Change of Address or Other Contact Information,” with the Court. Parties may contact Legal Counsel to receive assistance with filing Form MC-040 or to receive copies of the Court Service List via email at [JMarkman@rwqlaw.com](mailto:JMarkman@rwqlaw.com) and [JMetz@rwqlaw.com](mailto:JMetz@rwqlaw.com).

The Email Distribution List includes members of the Board, the TAC, the EWG and interested members of the public. The Email Distribution List is used to notify of Watermaster activities, including (but not limited to): regular and special Board meetings, TAC and EWG meetings, the completion of Water Rights Accounting, publication of the annual budget, and noticing the draft and final Annual Report. In addition, the Email Distribution List receives all materials that support Watermaster activities, such as the agenda and agenda package for Watermaster Board, TAC, and EWG meetings. The Email Distribution List is maintained by Watermaster staff. To be added to or removed from the Email Distribution List, please contact Watermaster staff via email at [borregospringswm@westyost.com](mailto:borregospringswm@westyost.com).

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<sup>24</sup> MC-040 Forms are available at: <https://selfhelp.courts.ca.gov/icc-form/MC-040>

## 2.5 Watermaster Meetings and Board Actions

Watermaster conducts monthly Board meetings on the second Thursday of the month at 4:30 p.m. The Watermaster also holds Special meetings, as needed to conduct business between regularly scheduled meetings. All Watermaster meetings are open to the public and are noticed via Watermaster's email distribution list and website.

During WY 2023, the Watermaster Board held a total of 11 Regular Meetings and two Special Meetings. One Regular Meeting was cancelled. Most meetings of the Board were held virtually. The virtual meetings were conducted via the GoToMeeting® platform that has both telephone and video call-in options. For the first time since its formation, the Board held two in-person Board meetings in WY 2023 (that also provided for virtual attendance via GoToMeeting). Table 4 lists the Board meeting dates for WY 2023.

Electronic copies of all Board meeting agendas, packets, presentation materials, recordings, and approved minutes are available on Watermaster's website (<https://borregospringswatermaster.com>). Appendix A of this Annual Report contains a record of the Board's motions and actions for WY 2023.

**Table 4. Watermaster Board Meetings During the Reporting Period – WY 2023**

Meeting Date	Meeting Type	Meeting Platform
October 13, 2022	Regular	Virtual
November 10, 2022	Regular	Virtual
November 15, 2022	Special	Virtual
December 8, 2022	Regular	In-Person at the Borrego Springs Library
January 12, 2023	Regular	Virtual
February 9, 2023	Regular	Virtual
March 9, 2023	Regular	Virtual
April 6, 2023	Regular	Virtual
April 17, 2023	Special	Virtual
May 11, 2023	Regular	Virtual
June 14, 2023	Regular	In-Person at the Borrego Springs Library
July 13, 2023	Regular	Virtual
September 14, 2023	Regular	Virtual

## 2.6 Rules and Regulations

The Rules and Regulations are included with the Judgment as Exhibit 5. A copy is posted to the Watermaster [website](#)<sup>25</sup>. The Judgment specifies that Rules and Regulations may only be amended by a Supermajority Vote of the Watermaster Board. All amendments must be consistent with the Judgment and, at the request of the Watermaster Board or any Party with objections, must be reviewed and approved by the Court before any proposed changes become effective. During the reporting period, no changes to the Rules and Regulations were considered.

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<sup>25</sup><https://borregospringswatermaster.com/wp-content/uploads/2020/12/rules-and-regulations-1.pdf>

## **2.7 Board Resolutions**

Table 5 lists the Board resolutions adopted during WY 2023. All resolutions are available on Watermaster's [website](#)<sup>26</sup>.

**Table 5. Watermaster Board Resolutions Adopted in WY 2023**

Resolution Number	Resolution Date	Resolution Title
23-01	March 9, 2023	Establish Guidelines for the Technical Advisory Committee Process
23-02	March 9, 2023	Establishing a Revised Comprehensive Metering Program

## **2.8 Judgment Amendments**

At the September 14, 2023 meeting, the Board voted unanimously to file a motion with the Court to amend the Judgment to allow the Community Representative to appoint a member to the TAC on behalf of the public. The motion to amend the Judgment will be filed in WY 2024.

## **2.9 Financial Management**

Each year, Watermaster develops a budget that defines the operating expenses required to administer the Judgment in the ensuing year. The operating budget covers administrative services (including costs for financial audit, insurance, website, and miscellaneous expenses), legal services, engineering and technical services, funding to support the EWG, and reimbursable services to parties with manual-read meters<sup>27</sup>. The budget also defines the revenue sources that will fund the operating expenses and maintain cash reserves at a specific level. Under normal operative procedures, the Watermaster has a reserve goal of nine months of operating expenses.

Section IV.E.3 of the Judgment defines a detailed process and schedule for developing the annual budget and collecting pumping assessments to fund the budget. Section III.F of the Judgment also defines a separate process and periodic schedule by which the TAC advises the Watermaster on the scope of work and budget for technical work to determine Sustainable Yield. The TAC has advised or shall advise the Watermaster on the technical scope and budget as follows:

- By June 1, 2021, TAC to reach agreement on the scope and budget for technical work for October 1, 2021 through September 30, 2023 (completed).
- By January 1, 2025, TAC to reach agreement on the scope and budget for technical work for October 1, 2025 through September 30, 2029.
- By January 1, 2030, TAC to reach agreement on the scope and budget for technical work for October 1, 2030 through September 30, 2034.

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<sup>26</sup> <https://borregospringswatermaster.com/watermaster-resolutions/>

<sup>27</sup> The Judgment provides that all parties will install "smart" pumping meters that can be read via telemetry system. At the option of the Parties, manual-read meters may be installed, however the Party must cover all costs associated with collecting data manually. The costs include contract services with the BWD to perform the field work to manually read/record the meters and Watermaster staff time to coordinate with the BWD field crew and to collect self-reported meter reads in-between official Watermaster meter-read events.

## Water Year 2023 Annual Report for the Borrego Springs Subbasin

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To fund the annual budget, Watermaster levies pumping assessments to all active BPA Pumpers. Watermaster can also rely on the following sources to fund the budget:

- Cash reserves
- Overproduction Penalty Assessments
- Grants and loans

In WY 2022, Watermaster staff developed a detailed monthly financial model to support the development of the WY 2023 Budget. The financial model was first developed to support the development of vendor payment terms that would be needed to enable Watermaster to accept over two million dollars in grant funding through March 2025. The Watermaster now uses the financial model annually, and as needed, to develop or amend the annual budget.

Watermaster staff prepares monthly financial reports for review by the Board as part of the consent calendar during regular Board meetings. At a minimum, the monthly financial reports include the following:

- Income (Profit & Loss) Statement
- Balance Sheet
- Expense Distribution Detail
- Union Bank Checking Register

The following subsections describe the Watermaster's current grant funding and vendor payment terms, the final WY 2023 budget status and annual audit, and the WY 2024 budget and assessment approved in June 2023.

### **2.9.1 Grant Funding and Vendor Payment Terms**

In December 2021, the DWR released a solicitation package for grant funding for SGMA implementation (DWR SGMA grant). In this first round of grant solicitations, each of the 21 critically overdrafted basins in the state were guaranteed up to \$7.6 million in grant funding. In February 2022, on behalf of itself and four subgrantees eligible for funding, the BWD submitted a grant application package requesting \$6,115,833 in funding<sup>28</sup>. Included in the grant package were two Watermaster projects, including:

- Monitoring, Reporting, and GMP Update for Sustainable Management in the Borrego Springs Subbasin: \$1,983,250 funding request
- Biological Restoration of Fallowed Lands: \$755,340 funding request

The DWR SGMA grant award for the Watermaster projects (\$2,738,590) covers eligible work performed for these projects from January 2022 through March 2025. The notice of grant award was made by the DWR in April 2022 and the grant agreement between DWR and BWD was executed on December 13, 2022. The subsequent subgrantee agreement between BWD and Watermaster was executed on February 16, 2023.

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<sup>28</sup> DWR determined that BWD was the only eligible entity (a Public Agency) to apply for the SGMA grant funding directly. Watermaster is a subgrantee to BWD.

## Water Year 2023 Annual Report for the Borrego Springs Subbasin

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At the time that the grant was being awarded, it was identified that there would be a significant delay in the timing of performing work pursuant to the grant and receiving reimbursements from DWR, thus requiring a significant working capital investment by the Watermaster to implement the grant-funded projects. Watermaster staff developed a detailed monthly financial model to estimate the working capital investment over the grant implementation period. In April 2022, the working capital investment was projected to range from about \$600,000 to \$800,000 - depending on the timing of the reimbursements.

Recognizing the significant cost to the Pumpers to establish the working capital, the Watermaster explored options for financing through various financial institutions but was unable to find a solution given the unique nature of the Watermaster as an arm of the Court. The Watermaster Treasurer (Smith) recommended, and the Board subsequently directed, that Staff explore the possibility of obtaining extended payment terms with the two consultants that would be implementing the projects, West Yost, and Land IQ, as a means of covering the working capital investment necessary to support implementation. The financial model was used to support the development of vendor payment terms and define an alternative cash reserve target of seven months of operating expenses for the grant funding period. West Yost and Land IQ both agreed to extended payment terms that enabled Watermaster to delay payments on invoiced amounts and maintain a fiscally sound level of cash reserves through the closeout of the grant agreement with BWD and DWR.

For the period of the grant agreement and vendor payment terms, the Watermaster's monthly financial reports include accrual of monthly grant-reimbursable expenditures (Income Statement) and a statement of outstanding balances (including interest) owed to each vendor.

### **2.9.2 Water Year 2023 Budget Status and Annual Audit**

The Watermaster approved the WY 2023 Budget at its July 14, 2022 meeting. On April 6, 2023 the Board amended the WY 2023 Budget to address several issues that arose from the delays in executing an agreement to receive grant funds under the DWR SGMA grant, including establishing a supplemental pumping assessment to ensure sufficient cash reserves to meet the Watermaster's fiscal objectives and comply with the vendor payment terms while awaiting the first reimbursement check from the DWR.

Table 6 compares the amended WY 2023 budget to the Watermaster's actual revenues, expenditures, and reserves for WY 2023. For the revenue section, the table details the budget and actual for the invoiced amounts, revenues paid, and unpaid balances still owed to the Watermaster. As of the end of WY 2023:

- A total of 237% of budgeted revenues were accrued (\$1,541,949.36).
  - The significant variance compared to budget for this line item is due to the budget including only the amount that was anticipated to be received from DWR (\$0) in WY 2023, as opposed to the amount of reimbursable expenses accrued.
  - The accrual shown for the DWR Prop 68 grant reimbursement represents the amount of reimbursable expenditures requested from DWR in WY 2023 (\$886,032.85).
- A total of 79% of budgeted expenditures were spent (\$981,676.79). Spending by operating category included:
  - 93% of budgeted Watermaster Staff Administrative services

## Water Year 2023 Annual Report for the Borrego Springs Subbasin

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- 89% of budgeted other Administrative or Vendor services
- 79% of budgeted Legal services
- 79% of budgeted Technical and Engineering services
- 67% of budgeted Environmental Working Group services
- 120% of budgeted services to parties with manual read meters
- Watermaster had a payment liability totaling \$749,183.96, which is about 100% of the available credit through payment terms.
- Cash reserves were \$889,614.34, which represents about 7.7 months of operating expenditures. The surplus reserves over the 7-month reserve target were used to pay down the Land IQ and West Yost outstanding balances at the start of WY 2024.

The financial audit for WY 2023 was performed by C.J. Brown & Company, CPAs and is included with this report as Appendix B.

Table 6. Comparison of Approved and Actual Watermaster Budget in WY 2023

Revenues, Expenditures, and Reserves	Approved WY 2023 Budget (as Amended)	Actual WY 2023 (final)	Percent (%) of Budget	Variance to Date (Budget minus Actual)	Notes
<b>Revenues</b>	\$ 649,281	\$ 1,541,949.36	237%	\$ (892,668.36)	See below note re: DWR Prop 68 Revenue
Pumping Assessments Invoiced payments received	\$ 658,000	\$ 649,021.31	99%	\$ 8,978.69	Assessments less than budget due to credit owed to one BPA party
Bad Debt (non-payment on Assessments)	\$ (15,000)	\$ -	0%	\$ (15,000.00)	Have not recorded bad debt
Overproduction Penalty Assessments	\$ -	\$ -		\$ -	
Revenues Collected for Pass thru Expenses payments received	\$ 6,281	\$ 6,895	110%	\$ (614.20)	Services were more than budgeted in WY 2023, invoiced amount also accounts for credit for over payment in WY 2022 pre-invoiced amount
DWR Prop 68 Grant Reimbursements Accrued payments received	\$ -	\$ 886,032.85		\$ (886,032.85)	Issued invoices in September 2023 Payment due November 2023 Approved budget amount reflected expected payment amount made by DWR, instead of accrued reimbursement requested.
<b>Total Expenditures</b>	\$ 1,241,730	\$ 981,676.79	79%	\$ 260,053.61	
<b>Administrative Services</b>	\$ 333,973	\$ 306,502.43	92%	\$ 27,470.97	
Watermaster Staff Admin Services	\$ 237,772	\$ 220,480.27	93%	\$ 17,291.73	
Board Meetings	\$ 92,508	\$ 88,542.09	96%	\$ 3,965.91	
Technical Advisory Committee Meetings	\$ 29,590	\$ 27,510.75	93%	\$ 2,079.25	
Court Hearings	\$ 5,668	\$ 1,198.00	21%	\$ 4,470.00	
Stakeholder Outreach/Workshops	\$ 12,206	\$ 12,169.10	100%	\$ 36.90	
Administration and Management	\$ 67,800	\$ 58,473.33	86%	\$ 9,326.67	
Prop 68 Project Admin and Grant Reporting	\$ 30,000	\$ 32,587.00	109%	\$ (2,587.00)	
Other Administrative or Vendor Services	\$ 93,226	\$ 83,047.74	89%	\$ 10,178.66	
Financial Audit	\$ 8,555	\$ 8,425.00	98%	\$ 130.00	
Insurance	\$ 35,652	\$ 33,197.04	93%	\$ 2,454.73	Note: This is a pre-paid expense - this reflects balance sheet amount
Misc. Expenses	\$ 5,000	\$ -	0%	\$ 5,000.00	
Meter Accuracy Testing Vendors	\$ 13,000	\$ 12,600.00	97%	\$ 400.00	
Interest on Vendor Terms During Prop 68 Grant Period	\$ 31,020	\$ 28,825.70	93%	\$ 2,193.93	
Pass Through Expenses	\$ 2,975	\$ 2,974.42	100%	\$ 0.58	
Reimbursement to Settling Parties	\$ 716	\$ 715.67	100%	\$ 0.33	
Reimbursement to BWD for GSP	\$ 2,259	\$ 2,258.75	100%	\$ 0.25	
<b>Legal Services</b>	\$ 100,000	\$ 78,829.12	79%	\$ 21,170.88	
<b>Technical/Engineering Services</b>	\$ 417,406	\$ 331,047.00	79%	\$ 86,359.00	
General Technical Consultant Services	\$ 203,762	\$ 196,029.11	96%	\$ 7,732.89	
Coordinate/Implement meter reading program	\$ 30,893	\$ 28,752.75	93%	\$ 2,140.25	
Groundwater Monitoring Program	\$ 87,180	\$ 90,524.11	104%	\$ (3,344.11)	
Surface Water Monitoring Program	\$ -	\$ -		\$ -	Elected not to perform this task due to various constraints
Data Management and Reporting Data to DWR	\$ 18,083	\$ 11,932.50	66%	\$ 6,150.50	
Annual Report to the Court and DWR	\$ 52,442	\$ 53,027.75	101%	\$ (585.75)	
Address Inactive Wells via Abandonment/Conversion	\$ -	\$ 2,885.25		\$ (2,885.25)	CEQA work performed earlier than budgeted due to grant req.
As-needed technical support	\$ 15,164	\$ 8,906.75	59%	\$ 6,257.25	
Consulting Services with TAC Support/Input	\$ 213,644	\$ 135,017.89	63%	\$ 78,626.11	
Technical Work to Support Sustainable Yield Updates	\$ 146,322	\$ 75,233.50	51%	\$ 71,088.50	Behind schedule, will need some of the unspent budget in WY 2024
Development of Work Plan for an Expanded Groundwater Quality & Level Monitoring Workplan	\$ 46,392	\$ 49,013.39	106%	\$ (2,621.39)	
TSS Grant Implementation (new monitoring well)	\$ 11,000	\$ 10,771.00	98%	\$ 229.00	
5-Year Update of the GMP (required by DWR)	\$ -	\$ -		\$ -	Work deferred to WY 2024 for budget purposes
Address Ad Hoc Requests from the Board	\$ 9,930	\$ -	0%	\$ 9,930.00	No work requested this year
<b>Environmental Working Group</b>	\$ 384,070	\$ 257,747.52	67%	\$ 126,322.48	
Biological Restoration of Fallow Lands	\$ 378,301	\$ 257,747.52	68%	\$ 120,553.48	Behind schedule, will need to use the unspent budget in WY 2024
Ad Hoc EWG Meetings/Requests	\$ 5,769	\$ -	0%	\$ 5,769.00	No work requested this year
<b>Services to Parties with Manual Read Meters</b>	\$ 6,281	\$ 7,550.72	120%	\$ (1,269.72)	
<b>Liabilities on Payment Terms</b>					
Beginning Balance	\$ -	\$ -		\$ -	
Year-End (or Current) Balance	\$ 877,108	\$ 749,183.96	85%	\$ 127,924.00	
<b>Cash Reserves</b>					
Beginning Cash Reserves	\$ 523,518	\$ 523,517.65		\$ -	
Year-End or Current Cash Reserve Balance	\$ 810,229	\$ 889,614.34	110%	\$ (79,385.65)	
Number of Months of Operating Reserve	7.00	7.69	110%	\$ (0.69)	Seven months is target during grant period

### **2.9.3 Water Year 2024 Budget**

The Watermaster approved the WY 2024 Budget at its June 14, 2023 regular meeting. The full budget memo is included with this report as Appendix C. Table 7 shows the approved line-item budget for WY 2024, including revenue, expenditures, deferred payment liabilities, and reserves. Table 7 also includes the projected budgets and year-end balances for WYs 2025 through 2028. Approval of the WY 2024 Budget, included approval of the following:

- A WY 2024 Pumping Assessment of \$458,0000.
- An Overproduction Penalty Assessment of \$500 per acre-foot. This is the minimum rate allowed by the Judgment (Section III.G.4).
- Operating expenditures in the amount of \$1,527,952, of which \$1,100,904 is grant reimbursable work.

Following approval, Watermaster staff published the WY 2024 Budget to the Watermaster website and issued notice via the email distribution list. No Party challenged the approved budget.

**Table 7.**  
**Detailed Five-Year Projection of Borrego Springs Watermaster Operating Budget: Water Years 2024 through 2028**

**Assuming Vendor Extended Payment Terms, 8-Month Delay in DWR Grant Request Reimbursements, and Target for 7-month Operating Reserve**

Revenues, Expenditures, and Reserves	Amended WY 2023 Budget	Projected Actual WY 2023	WY 2024	Projected Budget <sup>(a)</sup>			
				WY 2025	WY 2026	WY 2027	WY 2028
<b>Revenues<sup>(b)</sup></b>	<b>\$ 649,281</b>	<b>\$ 1,679,164</b>	<b>\$ 1,561,374</b>	<b>\$ 1,138,324</b>	<b>\$ 256,863</b>	<b>\$ 557,069</b>	<b>\$ 557,281</b>
Pumping Assessments Collected	\$ 658,000	\$ 658,000	\$ 458,000	\$ 250,000	\$ 250,000	\$ 550,000	\$ 550,000
Bad Debt (non-payment on Assessments)	\$ (15,000)	\$ (15,000)	\$ (4,000)	\$ -	\$ -	\$ -	\$ -
Overproduction Penalty Assessments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Revenues Collected for Pass thru Expenses	\$ 6,281	\$ 6,281	\$ 6,469	\$ 6,664	\$ 6,863	\$ 7,069	\$ 7,281
DWR Prop 68 Grant Reimbursements <sup>(c)</sup>	\$ -	\$ 1,029,883	\$ 1,100,904	\$ 881,661	\$ -	\$ -	\$ -
<b>Total Expenditures<sup>(d)</sup></b>	<b>\$ 1,241,730</b>	<b>\$ 1,179,205</b>	<b>\$ 1,527,952</b>	<b>\$ 1,109,903</b>	<b>\$ 561,203</b>	<b>\$ 552,022</b>	<b>\$ 567,308</b>
<b>Administrative Services</b>	<b>\$ 333,973</b>	<b>\$ 318,223</b>	<b>\$ 405,695</b>	<b>\$ 377,630</b>	<b>\$ 245,373</b>	<b>\$ 227,317</b>	<b>\$ 233,461</b>
<b>Watermaster Staff Admin Services</b>	<b>\$ 237,772</b>	<b>\$ 228,035</b>	<b>\$ 280,284</b>	<b>\$ 263,872</b>	<b>\$ 188,242</b>	<b>\$ 193,890</b>	<b>\$ 199,706</b>
Board Meetings	\$ 92,508	\$ 93,858	\$ 101,120	\$ 104,153	\$ 80,000	\$ 82,400	\$ 84,872
Technical Advisory Committee Meetings	\$ 29,590	\$ 29,590	\$ 45,326	\$ 30,000	\$ 23,175	\$ 23,870	\$ 24,586
Court Hearings	\$ 5,668	\$ 2,239	\$ 4,016	\$ 4,136	\$ 4,261	\$ 4,388	\$ 4,520
Stakeholder Outreach/Workshops	\$ 12,206	\$ 12,206	\$ 12,590	\$ 12,954	\$ 6,000	\$ 6,180	\$ 6,365
Administration and Management	\$ 67,800	\$ 62,651	\$ 72,628	\$ 72,628	\$ 74,807	\$ 77,051	\$ 79,363
<b>Prop 68 Project Admin and Grant Reporting</b>	<b>\$ 30,000</b>	<b>\$ 27,491</b>	<b>\$ 44,604</b>	<b>\$ 40,000</b>	\$ -	\$ -	\$ -
<b>Other Administrative or Vendor Services</b>	<b>\$ 93,226</b>	<b>\$ 87,213</b>	<b>\$ 125,411</b>	<b>\$ 113,759</b>	<b>\$ 57,130</b>	<b>\$ 33,427</b>	<b>\$ 33,755</b>
Financial Audit	\$ 8,555	\$ 8,425	\$ 10,000	\$ 10,300	\$ 10,609	\$ 10,927	\$ 11,255
Insurance	\$ 35,651	\$ 33,197	\$ 40,474	\$ 41,688	\$ 42,939	\$ 20,000	\$ 20,000
Misc. Expenses	\$ 5,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500
Meter Accuracy Testing Vendors	\$ 13,000	\$ 12,600	\$ 13,500	\$ 14,000	\$ -	\$ -	\$ -
<b>Interest on Vendor Terms During Prop 68 Grant Period<sup>(e)</sup></b>	<b>\$ 31,020</b>	<b>\$ 30,492</b>	<b>\$ 58,937</b>	<b>\$ 45,271</b>	<b>\$ 1,083</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Pass Through Expenses</b>	<b>\$ 2,975</b>	<b>\$ 2,975</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Reimbursement to Settling Parties	\$ 716	\$ 716	\$ -	\$ -	\$ -	\$ -	\$ -
Reimbursement to BWD for GSP	\$ 2,259	\$ 2,259	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Legal Services</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 103,000</b>	<b>\$ 106,090</b>	<b>\$ 109,273</b>	<b>\$ 112,551</b>
<b>Technical/Engineering Services</b>	<b>\$ 417,406</b>	<b>\$ 418,248</b>	<b>\$ 744,298</b>	<b>\$ 457,068</b>	<b>\$ 182,877</b>	<b>\$ 188,363</b>	<b>\$ 194,014</b>
<b>General Technical Consultant Services</b>	<b>\$ 203,762</b>	<b>\$ 204,604</b>	<b>\$ 403,556</b>	<b>\$ 369,923</b>	<b>\$ 172,429</b>	<b>\$ 177,602</b>	<b>\$ 182,930</b>
Coordinate/Implement meter reading program	\$ 30,893	\$ 27,739	\$ 30,388	\$ 31,634	\$ 26,889	\$ 27,696	\$ 28,526
Groundwater Monitoring Program	\$ 87,180	\$ 87,351	\$ 99,151	\$ 101,940	\$ 60,000	\$ 61,800	\$ 63,654
Data Management and Data Reporting	\$ 18,083	\$ 18,083	\$ 19,890	\$ 16,567	\$ 14,910	\$ 15,357	\$ 15,818
Annual Report to the Court and DWR	\$ 52,442	\$ 53,028	\$ 50,936	\$ 52,464	\$ 54,038	\$ 55,659	\$ 57,329
<b>Address Inactive Wells via Abandonment/Conversion</b>	<b>\$ -</b>	<b>\$ 3,239</b>	<b>\$ 187,551</b>	<b>\$ 151,210</b>	\$ -	\$ -	\$ -
As-needed technical support	\$ 15,164	\$ 15,164	\$ 15,640	\$ 16,109	\$ 16,592	\$ 17,090	\$ 17,603
Grant services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Consulting Services with TAC Support/Input</b>	<b>\$ 213,644</b>	<b>\$ 213,644</b>	<b>\$ 340,742</b>	<b>\$ 87,144</b>	<b>\$ 10,448</b>	<b>\$ 10,761</b>	<b>\$ 11,084</b>
<b>Technical Work to Support Sustainable Yield Updates</b>	<b>\$ 146,322</b>	<b>\$ 146,322</b>	<b>\$ 200,240</b>	<b>\$ 17,655</b>	\$ -	\$ -	\$ -
Development of Work Plan for an Expanded Groundwater Quality & Level Monitoring Workplan	\$ 46,392	\$ 46,392	\$ -	\$ -	\$ -	\$ -	\$ -
TSS Grant Implementation (new monitoring well)	\$ 11,000	\$ 11,000	\$ -	\$ -	\$ -	\$ -	\$ -
5-Year Update of the GMP (required by DWR)	\$ -	\$ -	\$ 130,654	\$ 59,346	\$ -	\$ -	\$ -
Address Ad Hoc Requests from the Board	\$ 9,930	\$ 9,930	\$ 9,848	\$ 10,143	\$ 10,448	\$ 10,761	\$ 11,084
<b>Environmental Working Group</b>	<b>\$ 384,070</b>	<b>\$ 336,453</b>	<b>\$ 271,490</b>	<b>\$ 165,541</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>
<b>Biological Restoration of Fallowed Lands</b>	<b>\$ 378,301</b>	<b>\$ 330,684</b>	<b>\$ 265,394</b>	<b>\$ 159,262</b>	\$ -	\$ -	\$ -
<b>Ad Hoc Requests and EWG Meetings</b>	<b>\$ 5,769</b>	<b>\$ 5,769</b>	<b>\$ 6,096</b>	<b>\$ 6,279</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>
<b>Services to Parties with Manual Read Meters</b>	<b>\$ 6,281</b>	<b>\$ 6,281</b>	<b>\$ 6,469</b>	<b>\$ 6,664</b>	<b>\$ 6,863</b>	<b>\$ 7,069</b>	<b>\$ 7,281</b>
<b>Liabilities on Payment Terms<sup>(f)</sup></b>							
<b>Beginning Balance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 877,108</b>	<b>\$ 305,790</b>	\$ -	\$ -	\$ -
<b>Minimum Monthly Balance</b>	<b>\$ -</b>		<b>\$ 305,790</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Maximum Monthly Balance</b>	<b>\$ 877,108</b>		<b>\$ 871,840</b>	<b>\$ 633,433</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Year-End Balance</b>	<b>\$ 877,108</b>	<b>\$ 803,450</b>	<b>\$ 305,790</b>	<b>\$ 185,580</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Cash Reserves<sup>(g)</sup></b>							
<b>Beginning Cash Reserves</b>	<b>\$ 523,518</b>	<b>\$ 523,518</b>	<b>\$ 842,513</b>	<b>\$ 619,387</b>	<b>\$ 619,387</b>	<b>\$ 397,911</b>	<b>\$ 404,890</b>
<b>Year-End Cash Reserve Balance</b>	<b>\$ 810,229</b>	<b>\$ 842,513</b>	<b>\$ 619,387</b>	<b>\$ 619,387</b>	<b>\$ 397,911</b>	<b>\$ 404,890</b>	<b>\$ 405,950</b>
<b>Average Reserve Needed During the Year to Maintain Target Operating Expenses (7-9 months)</b>	<b>\$ 723,330</b>	<b>\$ 723,330</b>	<b>\$ 758,197</b>	<b>\$ 619,387</b>	<b>\$ 348,557</b>	<b>\$ 416,883</b>	<b>\$ 425,481</b>
<b>Minimum Month-End Reserve Balance</b>	<b>\$ 581,550</b>		<b>\$ 609,228</b>	<b>\$ 589,838</b>	<b>\$ 335,703</b>	<b>\$ 312,768</b>	<b>\$ 312,768</b>
<b>Average Month-End Reserve Balance</b>	<b>\$ 691,162</b>		<b>\$ 732,374</b>	<b>\$ 610,339</b>	<b>\$ 431,066</b>	<b>\$ 405,765</b>	<b>\$ 409,444</b>
<b>Variance from Desired Reserve</b>	<b>\$ (32,168)</b>	<b>\$ 119,183</b>	<b>\$ (25,822)</b>	<b>\$ (9,048)</b>	<b>\$ 82,509</b>	<b>\$ (11,118)</b>	<b>\$ (16,037)</b>
<b>Notes</b>							
(a) The projected budget is estimated based on Staff's best professional judgement as to how the cost of each line item will change over time. Some tasks increase at an assumed inflation rate of 3%; some tasks decrease in cost with efficiencies, followed by annual inflation increases; and some tasks fluctuate year to year based on the level of effort for non-routine work such as Sustainable Yield updates. For grant funded work, the projection matches the total allowable grant reimbursement.							
(b) Revenues shown are the amounts invoiced by Watermaster to pumpers, or in the case of the DWR grant, they are the amounts that are eligible for reimbursement, during the Water Year. In the case of the DWR Reimbursements, payment on the reimbursement requests are actually delayed by 8 months from request date. This delay in payment is taken into consideration in the financial model to determine when to defer or pay on vendor invoices to maintain the target cash reserves.							
(c) A total of \$2,738,590 was awarded for Watermaster projects. See also Note 2.							
(d) Expenditures highlighted in green will be <b>partially reimbursed</b> by the Prop 68 grant. Expenditures highlighted in blue will be <b>fully reimbursed</b> by the Prop 68 grant. Expenditures shown in bold, purple text are <b>costs that would not have been incurred (in part or in full)</b> absent the Prop 68 grant.							
(e) Combined interest to West Yost and Land IQ under proposed Payment Terms allowing an outstanding balance of up to \$550,000 per vendor in any 30-day period.							
(f) Reflects the balance owed to West Yost and Land IQ under Payment Terms allowing outstanding balance of up to \$550,000 each in any 30-day period.							
(g) The cash reserve projections are based on the monthly financial model prepared by Watermaster Staff to support extended payment terms with West Yost and Land IQ, based on expected timing of receipt of payment on Watermaster assessments and reimbursement requests and deferred payments to West Yost and Land IQ.							

## 3.0 WATERMASTER TECHNICAL ACTIVITIES

### 3.1 Monitoring and Data Management

This section describes the monitoring program implemented by the Watermaster to support the sustainable management of the Basin and includes the collection of climatic, surface-water, and groundwater data. These data are used to characterize and understand current Basin conditions and trends and to evaluate the Basin response to Physical Solution implementation. The data collected by Watermaster are post-processed into standardized formats, checked for quality assurance/quality control (QA/QC), and uploaded to a centralized relational database management system, HydroDaVE<sup>SM</sup>. The following subsections describe the Watermaster's groundwater and surface water monitoring efforts during the reporting period.

#### 3.1.1 Groundwater Pumping

Prior to the development of the Judgment and GMP, all municipal pumping wells and some golf course and private agricultural Pumpers were monitoring pumping via meters. Except for municipal pumping by BWD, most metered pumping was not being recorded and/or reported on a regular basis. In lieu of metered data, historical groundwater pumping was estimated using either numerical modeling with the BVHM or other water duty methods that consider the type of water use (such as area of irrigated landscape and crop types).

The Judgment requires that all non-De Minimis Pumpers install Watermaster-approved meters on all active groundwater wells to measure and record groundwater pumping. Metered pumping is reported to the Watermaster for the purpose of performing water rights accounting and technical analyses of the Basin. Each year, the Pumpers must perform a third-party verification of the accuracy of their meters.

The Watermaster has successfully implemented a program to collect monthly pumping data from Parties with a combination of Watermaster meter reads and self-reporting (via telemetry or manual-read of meters). The Board approved the following actions and resolutions to establish protocols for the metering program<sup>29</sup>:

- Adopted Resolution 2020-02 Establishing Approved Meters (March 2020).
- Adopted Resolution 2020-03 Establishing Criteria for Verification of Meter Calibration, Installation, and Accuracy (August 2020).
- Adopted Resolution 2020-05 Establishing Meter Read Protocols and Required Documentation (September 2020).
- Established a monthly frequency for meter read reporting to effectively implement the Judgment (November 2020). The monthly reads are accomplished through a combination of official Watermaster reading events and self-reporting.

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<sup>29</sup> The meter program resolutions are available on the Watermaster's website:  
<https://borregospringswatermaster.com/pumper-resources/>

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- Adopted Resolution 23-02 Establishing a Revised Comprehensive Metering Program (March 2023). Resolution 23-02 supersedes all prior actions and combines all elements of the metering program into one resolution.

Parties that are not in compliance with the meter installation and reporting requirements are considered to be not in good standing with the Watermaster.

### 3.1.1.1 Status of Meter Installation

As of the end of WY 2023, the following is the status of metering the BPA and other non-De Minimis Party wells:

- There are a total of 42 Parties with pumping rights defined in the Judgment (40 Parties with Exhibit 4 BPA rights and 2 Parties (ABDSP and BSUSD) with other non-De Minimis pumping rights).
- Of the 42 Parties with pumping rights:
  - 12 Parties (29%) are assumed to be or have confirmed they are not active Pumpers.
  - 27 Parties (64%) are confirmed Pumpers.
  - 3 Parties (7%) are of unknown status but are assumed to be active Pumpers.
- Among the 27 confirmed active pumping Parties, there are a total of 68 pumping wells. Of these 68 pumping wells:
  - 19 wells have smart meters installed. Full access to read the smart meters via telemetry has been provided to Watermaster staff at all 19 smart meters.
  - 49 wells have manual-read meters installed. Full cooperation to read the meters through a combination of official Watermaster reads and self-reporting was provided to Watermaster for the entirety of WY 2023.
- For the 3 Parties that Watermaster has not been able to confirm as active Pumpers, the Watermaster continues to estimate groundwater pumping for these Parties based on the water-duty methods used to establish BPA for the Judgment. In WY 2024, Watermaster staff and legal counsel will continue to seek means to contact these Pumpers.

### 3.1.1.2 Meter Reading Program

The meter reading program implemented during the reporting period was as follows:

- Watermaster maintained a monthly frequency for meter read reporting to support the effective implementation of the Judgment.
- For wells with smart meters:
  - Meter read data transmitted via telemetry was accessed and downloaded monthly by Watermaster.
  - Any time a telemetric read was not available due to system errors or other technical issues, the well owners were requested to provide self-reported meter reads until the telemetry issue could be resolved.

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- For manual-read meters:
  - Official Watermaster meter reads were collected bi-monthly by Watermaster's meter reading consultant (BWD) in November 2022, January 2023, March 2023, May 2023, July 2023, and September 2023.
  - Self-reporting of meter reads was performed by the well owners in October 2022, December 2022, February 2023, April 2023, June 2023, and August 2023.

All metered data are reviewed by Watermaster staff monthly and checked for QA/QC and are used to calculate monthly pumping volumes, which are stored in Watermaster's data management system.

### 3.1.1.3 Meter Accuracy Testing

Meter accuracy testing is the responsibility of the well owners. In WY 2023, Watermaster supported the Parties by identifying cost savings with vendors who could perform multiple meter reads per day over a period of a few weeks. Most of the meter accuracy testing for WY 2023 was completed in December 2022 and January 2023.

All meter verification information and accuracy tests were collected and reviewed by Watermaster staff and checked for compliance with accuracy standards. If a meter test indicated that a meter is not accurately reporting pumping, Watermaster requested corrective actions within 30 days.

Of the confirmed 68 BPA Party wells in the Basin:

- 56 wells were tested for accuracy, of these:
  - 52 wells tested within the required accuracy standard of +/- 5 percent.
  - 4 wells initially tested outside the accuracy standard and were subsequently serviced and retested to confirm post-service accuracy is within +/- 5 percent.
- 1 well was not tested because the well was inoperable during the testing period.
- 8 wells were not tested for accuracy because the wells were not planned to be operated in WY 2023 and beyond.
- 3 wells were not tested for unspecified reasons. In these cases, Watermaster performs follow-up outreach to explain testing and reporting requirements to work towards full compliance. Watermaster may, at its discretion, refer non-compliant Parties to the Court, but to date has not taken such action.

### 3.1.2 Groundwater Level and Quality Monitoring Program

The Borrego Springs Watermaster conducts monitoring programs for groundwater level and quality in the Basin pursuant to the Judgment and GMP. Generally, the main objectives of the monitoring programs are to collect the data necessary to:

- Demonstrate progress toward meeting the Sustainability Goal of the GMP, which is to ensure that by 2040 the Basin is operated within its Sustainable Yield without causing Undesirable Results. The main Undesirable Results to be avoided are the significant and unreasonable occurrences of the following Sustainability Indicators: chronic lowering of groundwater levels; reductions in groundwater storage; and degradation of groundwater quality. Current

conditions are compared to Sustainable Management Criteria (e.g. Minimum Thresholds, Interim Milestones, and Measurable Objectives) for the Sustainability Indicators for each of the three management areas in the Basin: the North Management Area, the Central Management Area, and the South Management Area.

- Inform adaptive management of the Basin to achieve the Sustainability Goal.
- Improve the BVHM in a cost-effective manner that offers the most benefit for the resources expended.

The groundwater level and quality monitoring are performed by Watermaster staff and the BWD semi-annually in the spring and fall of each year. The Watermaster maintains a webpage dedicated to the Groundwater Monitoring Program, where interested persons can download the Groundwater Monitoring Plan (GWMP), maps of the current groundwater-level and groundwater-quality monitoring networks, and results from each semi-annual monitoring event. The GWMP information is on the website at: <https://borregospringswatermaster.com/groundwater-monitoring-program>.

### **3.1.2.1 Groundwater Monitoring Plan**

Section VI.B of the Judgment calls for the Watermaster to develop a Water Quality Monitoring Plan (WQMP), with input from the TAC, within 24 months of entry of the Judgment (by April 8, 2023). The purpose of the WQMP is to understand water quality and how it is changing, so that the Watermaster can determine if changes in water quality are significant and unreasonable following consideration of the cause of impact, the affected beneficial use, and potential remedies. The WQMP must describe the network of monitoring wells, the frequency of monitoring, and the constituents to be monitored.

On April 6, 2023, the Watermaster adopted its GWMP<sup>30</sup> to satisfy the Judgment requirement to develop the WQMP. The GWMP addresses both groundwater-level and groundwater-quality monitoring to capitalize on grant funding awarded through the SGM Implementation Grant program administered by the DWR. The GWMP describes the monitoring objectives, the current monitoring network, frequency of monitoring, constituents monitored, database management, recommended locations for additional groundwater-level and groundwater-quality monitoring, recommendations and methods for expanding/improving the monitoring programs, how monitoring data will be reported, and the process for updating the GWMP.

A key element of the GWMP methods to expand the monitoring program is a public outreach and engagement effort whereby the Watermaster is seeking collaboration from the Borrego Springs community to help identify well owners that would be willing to allow the Watermaster to monitor their well(s). The Watermaster prepared public outreach and engagement materials and conducted outreach with members of the public in Borrego Springs to solicit interest from private well owners in participating in the monitoring program and/or to identify wells that may be a good candidate for filling a groundwater monitoring gap. The outreach materials include:

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<sup>30</sup><https://borregospringswatermaster.com/wp-content/uploads/2023/04/R-BSW-Groundwater-Monitoring-Program-FINAL-20230411.pdf>

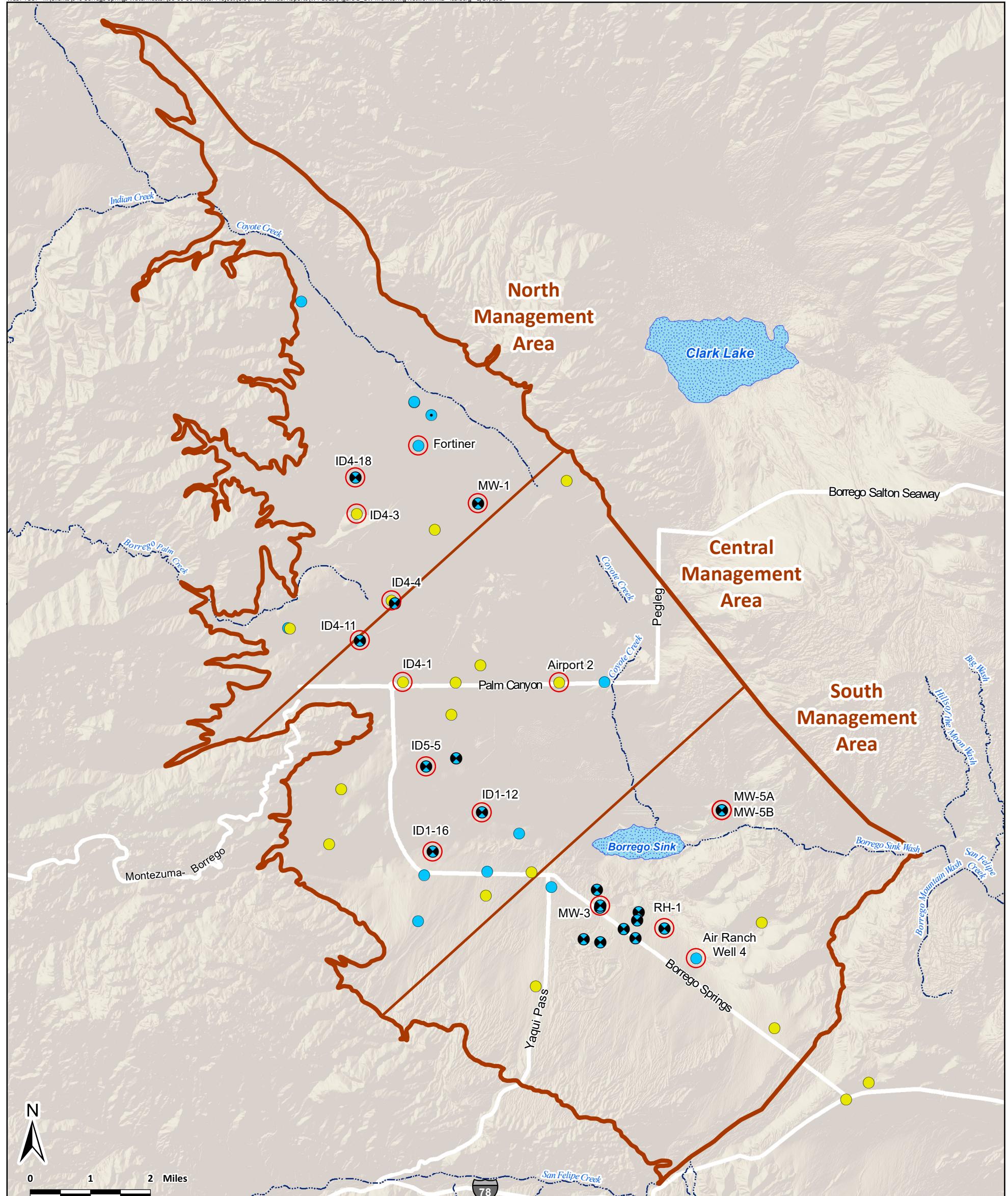
- Letter requesting participation in the GWMP
- Potential participant information form
- Map of the current groundwater monitoring network
- Frequently Asked Questions

These outreach materials are published on the [Watermaster's website](#). Wells identified by the public are then canvassed during a regularly scheduled semi-annual monitoring event. During the well canvass, the well will be assessed for the following: site access, current condition of the well, any repair(s) or rehabilitation required to convert the well to a monitoring well, if a transducer can be placed in the well, or if a groundwater quality sample can be collected. Based on the well canvass, the Watermaster will recommend whether the well is a suitable candidate to add to the groundwater quality and/or groundwater level monitoring network and develop an action plan to convert the well to a monitoring well.

### **3.1.2.2 Groundwater Monitoring Network as of WY 2023**

Wells included in the groundwater monitoring network were incorporated from previous monitoring networks established by the BWD, the County, DWR, and United States Geological Survey (USGS); and from recent public outreach efforts. Wells are selected for monitoring based on a combination of factors, including geographic location, screen interval relative to the three principal aquifers, accessibility, well condition, and continuity of historical data. Long-term trends are tracked from wells with long-term historical records dating to the mid-1950s.

The wells included in the current groundwater level and water quality monitoring program are listed in Table 8 and the locations are shown in Figure 2. Table 8 lists the wells by management area, and includes the local well name, State Well ID, well use (if known), type of monitoring performed, and, if applicable, the reason(s) why a sample or measurement was not collected during the WY 2023 events (fall 2022 and spring 2023).



#### Groundwater Monitoring Network

○ Representative Monitoring Well

#### Wells Monitored for Groundwater Level (symbol style)

- Manual Water-level Data
- Transducer Water-level Data
- No Water-level Data

#### Status of Groundwater Quality Sampling of Wells (symbol color)

- Sampled for Water Quality
- Not Sampled for Water Quality

#### Other Features

□ Borrego Springs Subbasin with Management Area Divisions

#### Surface Water Features

— Stream Channel

■ Dry Lake



Prepared by:



Figure 2

#### Groundwater Level and Quality Monitoring Network

Borrego Springs Watermaster  
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Table 8. Groundwater Level and Quality Monitoring Network and Wells Monitored in Water Year 2023

Local Well Name	State Well ID	Well Use	Groundwater Monitoring Network						Comments	
			Water Level			Water Quality				
			Method if in program <sup>(a)</sup>	Fall 2022	Spring 2023	Well in program?	Fall 2022	Spring 2023		
<b>North Management Area</b>										
ID4-18*	010S006E18J001S	Public Supply	transducer	x	x	yes	x	x		
ID4-3*	010S006E18R001S	Observation	manual	x	x					
ID4-4*	010S006E29K002S	Observation	manual							Unable to measure GWL in WY 2023 due to the well being converted to a monitoring well.
ID4-9	010S006E29K003S	Public Supply	transducer	x	x	yes	x	x		
MW-1*	010S006E21A002S	Observation	transducer	x	x	yes	x	x		
Evans	010S006E21E001S	Observation	manual	x	x					
Horse Camp	009S006E31E003S	Other	manual	x	x	yes	x	x		
Fortiner*	010S006E09N001S	Domestic	manual			yes		x		Unable to measure GWL; access to well denied by owner. BWD obtained access to collect GWQ sample in Spring 2023.
Auxiliary Well 3	010S005E25R002S	Other	manual	x	x					
Auxiliary Well 2	010S005E25R001S	Other	no			yes	x	x		Unable to measure GWL due to sounding tube obstruction
T2 Farms	010S006E09C001S	Irrigation	no			yes		x		New well added in Spring 2023. Unable to measure GWL due to sounding tube obstruction.
MW-6S <sup>(b)</sup>	010S06E08A003S	Observation	manual		x	yes		x		New well added in Spring 2023.
MW-6D <sup>(b)</sup>	010S06E08A002S	Observation	manual		x	yes		x		New well added in Spring 2023.
<b>Central Management Area</b>										
Anzio/Yaqui Pass	011S006E22E001S	Observation	manual	x	x					
BSR Well 6	011S006E09B002S	Irrigation	manual	x	x	yes	x	x		Barologger installed in Spring 2023.
Cameron 2	011S006E04F001S	Observation	manual	x	x					
County Yard	011S006E15G001S	Industrial	manual	x	x	yes	x	x		
ID1-10	011S006E22D001S	Public Supply	manual	x	x	yes	x	x		
ID1-12*	011S006E16A002S	Public Supply	transducer	x	x	yes	x	x		
ID1-16*	011S006E16N001S	Public Supply	transducer	x	x	yes	x	x		
ID4-1*	010S006E32R001S	Observation	manual	x	x					
ID4-10	011S006E18L001S	Observation	manual		x					GWL not measured by BWD in Fall 2022.
ID4-11*	010S006E32D001S	Public Supply	transducer	x	x	yes	x	x		
ID4-2	011S006E07K003S	Observation	manual	x	x					
ID4-5	010S006E33Q001S	Observation	manual	x	x					
ID5-5*	011S006E09E001S	Public Supply	transducer	x	x	yes	x	x		
MW-4	010S006E35Q001S	Observation	manual	x		yes	x	x		Spring 2023 GWL measurement was not recorded.
Paddock	011S006E22B001S	Observation	manual	x	x					
Palleson	010S006E33J001S	Observation	manual	x	x					
Wilcox	011S006E20A001S	Public Supply	manual	x	x	yes	x	x		
Hanna (Flowers)	010S006E14G001S	Observation	manual	x	x					
Airport 2*	010S006E35N001S	Observation	manual	x	x					
Terry Well	011S006E20R001S	Irrigation	manual		x	yes	x			Unable to measure GWL in Fall 2022 due to access issue. Unable to sample for GWQ in Spring 2023 due to no power.
<b>South Management Area</b>										
Air Ranch Well 4*	011S007E30L001S	Public Supply	manual	x	x	yes	x	x		
Army Well	011S006E34A001S	Observation	manual	x	x	yes				Unable to collect GWQ due to low water levels. Well being removed from GWQ network after Spring 2023.
Hayden (32Q1)	011S007E32Q001S	Observation	manual	x	x					
ID1-8	011S006E23J001S	Public Supply	transducer	x	x	yes	x	x		
JC Well	011S006E24Q001S	Observation	transducer	x	x	yes	x			Transducer replaced in Spring 2023. Unable to collect a representative GWQ sample in Spring 2023.
La Casa	011S006E23E001S	Irrigation	manual	x	x	yes	x	x		
MW-3*	011S006E23J002S	Observation	transducer	x	x	yes	x	x		
MW-5A*	011S007E07R001S	Observation	transducer		x	yes		x		Unable to access in Fall 2022 due to access road washed out.
MW-5B*	011S007E07R002S	Observation	transducer		x	yes		x		Unable to access in Fall 2022 due to access road washed out.
RH-1 (ID1-1)*	011S006E25A001S	Recreation	transducer	x	x	yes	x	x		Transducer replaced in Spring 2023.
RH-2 (ID1-2)	011S006E25C001S	Recreation	transducer	x	x	yes	x	x		Transducer replaced in Spring 2023.
RH-3	011S006E25C002S	Recreation	transducer	x	x	yes	x	x		Transducer replaced in Spring 2023.
RH-4	011S006E24Q002S	Recreation	transducer	x	x	yes	x	x		Transducer replaced in Spring 2023.
RH-5	011S006E26B001S	Recreation	transducer	x	x	yes				Unable to collect GWQ sample due to well rehabilitation.
RH-6	011S006E26H001S	Recreation	transducer	x	x	yes	x	x		Transducer replaced in Spring 2023.
WWTP	011S006E23H001S	Observation	transducer	x	x	yes	x	x		Transducer replaced in Spring 2023.
Bing Crosby Well	011S007E20P001S	Observation	manual	x	x					
<b>Outside Borrego Springs Subbasin</b>										
State Well	012S007E03L001S	Observation	manual	x	x					
Nel Well	012S007E04R001S	Observation	manual	x	x					
Wells not included in the groundwater level or groundwater quality monitoring program are greyed out.										
*Representative Monitoring Well with defined Minimum Thresholds and Measurable Objectives, as identified in Table 3-4 and Table 3-5 of the GMP										
(a) Wells denoted with "transducer" have a pressure transducer installed that continuously records water level measurements on a high frequency interval (15-minutes to 1 hour).										
(b) Water quality samples were collected by DWR in spring 2023 upon completion of the well construction.										

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As shown in Table 8, the monitoring network currently consists of 52 groundwater wells, which include the 16 Representative Monitoring Wells identified in the GMP. Some of the wells in the monitoring network are strictly observation wells (no pumping), while others are used to pump groundwater for municipal, recreation (e.g., golf courses), and other purposes. Of the 52 wells in the network:

- 50 are designated to be monitored for groundwater levels. Of these 50 wells:
  - 31 wells are measured using manual methods. Manual measurements are collected semi-annually in the spring and fall of each year.
  - 19 wells are measured at a high frequency interval (15 minutes to 1 hour) using a pressure transducer with an integrated data logger.
- 34 are designated to be monitored for water quality.

In WY 2023, four wells were added to the monitoring network. All four wells added to the monitoring network in WY 2023 are located in the North Management Area and include:

- Two newly constructed monitoring wells (MW-6S and MW-6D), which are equipped for monitoring groundwater level and quality. The monitoring well pair was constructed by DWR in Spring 2023 under the Technical Support Services (TSS) program. The Spring 2023 water quality data were sampled by DWR as part of completion of the well. Watermaster will collect its first monitoring event at these wells in Fall 2023 (e.g. in WY 2024).
- The T2 Farms Orchard Well was added to the groundwater-quality monitoring due to access granted through public outreach efforts.
- Access was regained at the Fortiner well in the North Management Area, access to which had been interrupted since 2019.

During WY 2023, groundwater levels were able to be monitored at 48 of the 50 wells in the network. Two wells were not able to be monitored in fall 2022 or spring 2023: ID4-4 and Fortiner (see Table 8). The two wells will remain in the program as they will be able to be monitored in the future.

Seven new transducers were installed to replace failing units at the following wells: JC well, RH-1, RH-2, RH-3, RH-4, RH-6, and WWTP. And, a new Barologger was installed in the BSR 6 well to compensate transducer measurements for barometric pressure at surrounding wells. The new equipment was funded by the DWR SGM grant.

During WY 2023, groundwater quality samples were able to be collected at 32 of the 34 wells in the network. Two wells were unable to be sampled in both fall 2022 and spring 2023: RH-5 and Army Well. Watermaster staff were unable to sample RH-5 in WY 2023 due to the well being rehabilitated. RH-5 will continue to be monitored moving forward. A groundwater quality sample was not collected from the Army Well because the water level was too low to maintain sufficient head and pressure. The Army Well has not been able to be sampled since fall 2021 due to low water levels and, because of this, this well will be removed from the groundwater quality network moving forward. Additionally, due to the inability to collect a representative groundwater quality sample from the JC well in spring 2023, this well will also be removed from the groundwater quality monitoring network moving forward.

### **3.1.2.3 Efforts to Expand the Groundwater Monitoring Program**

In evaluating how to expand/improve the monitoring programs, the GWMP considered the data gaps identified in the GMP and identified additional limitations. Filling these data gaps and expanding the groundwater monitoring networks will improve the understanding of the hydrogeology of the Basin by collecting additional information on seasonal long-term trends in groundwater quality, the effects of recharge and GMP implementation on groundwater quality, and the depth distribution of groundwater quality, groundwater elevation, groundwater-flow directions, and hydraulic gradients in the North Management Area and the Central Management Area. The GWMP identified a total of 15 locations where the groundwater-level monitoring network could be expanded to address the recommendations in the GMP and meet the objectives of the monitoring program<sup>31</sup>. The GWMP also identified a total of 20 locations where the groundwater-quality monitoring network could be expanded to address the recommendations in the GMP and meet the objectives of the monitoring program<sup>32</sup>.

To implement the recommended improvements to the groundwater monitoring network, the GWMP identified that there are three primary methods to add a well to the monitoring network, which include: i) using an existing pumping well, ii) converting an abandoned or inactive well into a monitoring well, and iii) constructing a new monitoring well. Expanding the groundwater monitoring network during the first two years of implementation of the GWMP is focused on using existing wells in the Basin.

In WY 2023, the Watermaster, in coordination with the TAC, made efforts to expand the groundwater monitoring networks, with an emphasis on identifying existing wells in the Basin that could be incorporated into the monitoring network. Efforts included:

- Engaged with the public to solicit interest from private well owners in participating in the monitoring program and/or to identify wells that may be a good candidate for filling a monitoring gap (see Section 3.6.2 for more information).
- Performed site visits of wells identified through public outreach.
- Collected well construction information on candidate wells.
- Performed a desktop assessment of all candidate wells that could be added to the monitoring networks to evaluate which wells are most appropriate to add.

Through these efforts, the Watermaster identified 35 wells that are potential candidates for filling either a groundwater-level and/or groundwater quality monitoring gap in WY 2023. Of the 35 wells, 14 wells could potentially fill gaps in the groundwater-level monitoring network and 24 wells could potentially fill gaps in the groundwater-quality monitoring network.

In WY 2024, the Watermaster will canvass the potential well candidates identified to date and continue public outreach efforts to expand the groundwater monitoring program and fill data gaps identified in the GWMP.

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<sup>31</sup> See Figure 1 and Table 2 in the GWMP.

<sup>32</sup> See Figure 2 and Table 4 in the GWMP.

### 3.1.3 Surface Water Monitoring

As part of the development of the GMP, surface-water flow in Coyote Creek was investigated to assess whether the perennial and ephemeral creek segments are gaining water or losing water to the underlying aquifer system. To complete this analysis, the perennial extent of flow into the Basin was measured on a semi-annual basis (fall and spring) from spring 2018 to fall 2019 at five sites: Upper Historical Stream Gage Site (USGS 10255800), Third Crossing, Locking Gate, Lower Historical Stream Gage Site (USGS 10255805), and First Crossing. The manual flow measurements and visual observation of stream conditions on Coyote Creek taken from spring 2018 to fall 2019 show that stream flow decreases from upstream to downstream and can be completely infiltrated by the First Crossing (Dudek, 2020b; West Yost, 2021). This suggests that the Creek system, in aggregate, is losing water to the underlying aquifer system.

Watermaster staff continued to visit Coyote Creek, but beginning in fall 2020, all five sites on Coyote Creek were either i) dry, or ii) not accessible for manual flow measurements due to excessive vegetation growth, shallow flows, and the presence of braided channels. Based on these observations, it was determined to be impractical to measure streamflow in Coyote Creek and Watermaster staff has since relied on visual observations to describe Coyote Creek flow conditions. In WY 2023, Watermaster staff visited Coyote Creek in the spring and fall and continued to make visual observations of flow conditions. During each field event, photographs are taken of the five surface water sites. At each site, photographs are taken of the stream facing upstream, downstream, and side-stream. If needed these photographs could be used to make qualitative assessments of changes in the stream width and of surface water depth.

## 3.2 Technical Advisory Committee

Section IV.G of the Judgment and Article III of the Rules & Regulations provides for the formation of the Watermaster TAC. The Judgment defines the TAC as (Section I.A.58):

*The advisory body established pursuant to Section IV.G(1) of this Judgment to study technical aspects of the Basin and to issue recommendations to Watermaster based on such technical study for the purpose of achieving Sustainable Groundwater Management in the Basin in an effective and efficient manner, consistent with the rights and obligations of the Parties established by this Judgment.*

Section IV.E.7 calls for the TAC to meet at least semi-annually to review Watermaster activities pursuant to the Judgment. The types of activities within the subject matter expertise of the TAC on which recommendations are to be made to the Watermaster pursuant to the Judgment are summarized as follows.

**Determination of Sustainable Yield (Section II.E; Section III.F).** The Judgment describes the detailed process for re-determining the Sustainable Yield and the implementation of the Rampdown through 2040, and provides a schedule for the TAC to develop and agree upon a scope of work to determine the Sustainable Yield.

**Evaluation of Carryover (Section III.B).** The Carryover provision for unused annual allocations of pumping rights must be re-evaluated by January 1, 2025, in consultation with the TAC.

**BPA transfers (Section III.I.5).** The Watermaster will seek input from the TAC if it seeks to restrict Permanent Transfers and Leases to specific areas of the Basin. This is an as-needed duty of the TAC.

**Selection of Watermaster staff (Section IV.C).** This is an as-needed duty of the TAC.

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**Water quality monitoring plan (Section VI.B).** A water quality monitoring plan must be developed with TAC input within 24 months of entry of the Judgment. The TAC will also support the Watermaster's evaluation of water-quality data and any findings of impacts on beneficial uses and associated remedies.

### **3.2.1 TAC Responsibilities**

Section IV.G.2 of the Judgment defines the TAC's duties and responsibilities to include making recommendations based on best science and data collected regarding the Water Budget and the avoidance of undesirable results, including without limitation, information generated from model runs of the BVHM. With regards to making recommendations, Section IV.G.1 of the Judgment provides that the TAC will endeavor to decide all matters by consensus. In WY 2023, the Board adopted guidelines for the TAC process ([Resolution 23-01](#))<sup>33</sup>. The guidelines were adopted to clarify the role of the Technical Consultant and the expectations of the participants in the TAC.

For issues discussed during TAC meetings that require a formal TAC recommendation to the Watermaster Board, a TAC recommendation report is produced. The Technical Consultant summarizes the TAC recommendations based on the discussion at the TAC meeting and coordinates with the TAC via email with the goal of obtaining TAC consensus. A report is prepared describing the TAC recommendation and documenting if consensus has been achieved amongst the TAC. If consensus cannot be achieved, the TAC recommendation report to the Watermaster describes the differences in opinion and arguments for each opinion, as required in Section IV.G of the Judgment and as described in Resolution 23-01. A draft of the report is circulated for comment and input by all TAC members prior to submission of the report to the Watermaster to ensure the recommendation accurately reflects the views of each TAC member.

### **3.2.2 TAC Membership**

Under Section IV.G.1 of the Judgment, TAC membership is open to an expert hired by any Party holding BPA or the County. The expert must be a California licensed hydrogeologist, California licensed engineer, professional hydrogeological modeler, professional groundwater statistician, or other California licensed member of a recognized professional discipline approved by the Watermaster. As noted in Section 2.8 of the annual report, at the September 14, 2023 meeting, the Board voted to file a motion to amend the Judgment to allow the Community Representative to appoint a member to the TAC on behalf of the public. The motion to amend the Judgment will be filed in WY 2024.

Table 9 lists the members of the TAC as of the end of the reporting period on September 30, 2023. In WY 2023, one new member was added to the TAC. Detailed information about each TAC member's qualifications is provided on the Watermaster's [website](#)<sup>34</sup>.

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<sup>33</sup><https://borregospringswatermaster.com/wp-content/uploads/2023/03/Resolution-23-01-Guidelines-for-TAC-Process-Executed.pdf>

<sup>34</sup> <https://borregospringswatermaster.com/technical-advisory-committee-meetings/>

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**Table 9. Technical Advisory Committee Membership in Water Year 2023**

Representing	TAC Member
Borrego Water District	Trey Driscoll, PG, CHG - Principal Hydrogeologist, Intera
T2 Borrego, LLC	Tom Watson, PG – Principal Geologist, Aquilologic
Parties who are members of the Agricultural Alliance for Water and Resource Education (“AAWARE”)	Bob Wagner, PE – Principal Water Resources Engineer, Wagner & Bonsignore
County of San Diego	Jim Bennett, PG, CHG – Water Resources Manager, County of San Diego
Roadrunner Club	John Peterson, PG, CHG - Retired (Appointed July 2023)

### 3.2.3 Reporting Period Meetings and Recommendations

The meetings of the TAC are facilitated by Watermaster's Technical Consultant. TAC meetings are held virtually and are open to the public. The public is afforded the opportunity to address the TAC at the beginning and end of the meetings, and during TAC discussion if requested by the TAC. Table 10 lists the TAC meeting dates, agenda topics, and summary of the recommendations to the Board for the reporting period. The TAC meeting materials are available on the Watermaster's [website](#)<sup>35</sup>.

**Table 10. Technical Advisory Committee Meetings and Topics During the Reporting Period**

Meeting Date	Agenda Topics
November 2, 2022	<ul style="list-style-type: none"><li>• Recommend revised technical scope-of-work for WY 2023 to support the redetermination of the Sustainable Yield, based on outcomes of work performed in WY 2022</li><li>• Review and discuss the draft technical memorandum <i>Groundwater Monitoring Gap Analysis</i></li><li>• Methods to estimate annual storage change</li><li>• Status update on the new groundwater monitoring well to be constructed by and funded through the DWR's TSS Program</li></ul>
February 21, 2023	<ul style="list-style-type: none"><li>• Review of the new guidelines regarding TAC procedures</li><li>• Review of draft <i>Groundwater Monitoring Plan</i></li><li>• Recommendations for repurposing SGM grant funding to support the revised scope of work for redetermination of the Sustainable Yield</li><li>• Status update on the new groundwater monitoring well constructed by and funded through the DWR's TSS Program</li></ul>
June 5, 2023	<ul style="list-style-type: none"><li>• Review results of Task 1 and Task 2 of the revised scope-of-work to Redetermine the Sustainable Yield by 2025:<ul style="list-style-type: none"><li>○ Task 1 – <i>Compare FMP-Estimated Pumping Actual Pumping for WY 2022</i></li><li>○ Task 2 – <i>Update Water-Use Factors in the FMP</i></li></ul></li></ul>
August 29, 2023	<ul style="list-style-type: none"><li>• Review results of Task 2 – <i>Update Water-Use Factors in the FMP</i> of the revised scope-of-work to Redetermine the Sustainable Yield by 2025</li><li>• Discuss the DWR's Statewide Airborne Electromagnetic Survey (AEM) project</li><li>• Status update on the new groundwater monitoring well constructed by and funded through the DWR's TSS Program</li></ul>

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<sup>35</sup> <https://borregospringswatermaster.com/technical-advisory-committee-meetings/>

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The TAC made one formal recommendation to the Board during WY 2023 regarding the scope-of-work to redetermine the Sustainable Yield by 2025. The TAC reviewed and made recommendations for a revised scope of work and budget (prepared by West Yost) for seven potential tasks to perform and support the redetermination of the Sustainable Yield, based on the results of the BVHM extension. Table 11 summarizes each TAC member's recommendation of whether to perform each potential task listed in the revised scope-of-work to redetermine the Sustainable Yield. The official TAC recommendation report dated January 27, 2023 is available on the Watermaster's [website](#)<sup>36</sup>. The Board approved the TAC-majority recommended scope of work, which included Tasks 1, 2, 3, 6, and 7 listed in Table 11.

**Table 11. Summary of TAC Recommendation to the Board on the Scope of Work to Redetermine the Sustainable Yield**

Recommendation(s) to the Board	TAC Committee Member Party and Representative <sup>37</sup>				Watermaster Board Decision
	AAWARE <i>Bob Wagner</i>	BWD <i>Trey Driscoll</i>	County of San Diego <i>Jim Bennett</i>	T2 Borrego, LLC <i>Tom Watson</i>	
Task 1 – Compare Farm Process (FMP)-Estimated Pumping to Actual Pumping for WY 2022	X	X	X	X	Approved as Task 1
Task 2 – Update Water-Use Factors in the FMP	X	X	X	X	Approved as Task 2
Task 3 – Correct Errors identified in the 2021 BVHM	X	X	X	X	Approved as Task 3
Task 4 – Develop and Implement New Methods to Estimate Recharge		X			Not approved
Task 5 – Upgrade BVHM to Use the New Version of MODFLOW-OWHM					Not approved
Task 6 – Perform Model Recalibration	X	X	X	X	Approved as Task 4
Task 7 – Determine the Sustainable Yield (including documentation)	X	X	X	X	Approved as Task 5

<sup>36</sup> The reasons for each TAC members' recommendation regarding the revised scope of work are documented in the report available on the Watermaster's website at: [https://borregospringswatermaster.com/wp-content/uploads/2023/02/TAC-Recommendation-Report\\_SY-2023-24\\_final.pdf](https://borregospringswatermaster.com/wp-content/uploads/2023/02/TAC-Recommendation-Report_SY-2023-24_final.pdf)

<sup>37</sup> John Peterson was not yet elected as a member of the TAC during this TAC-recommendation to the Board.

### 3.3 Environmental Working Group

The Watermaster has established an EWG to advise the Watermaster on GDEs and any other matters approved by the Board. At its November 2020 meeting, the Board established a sub-committee consisting of Directors Jim Bennett and Mark Jorgensen to develop a recommendation on a process to establish the EWG. The subcommittee established a draft mission statement for the EWG. The final mission statement approved by the Board is:

*The role of the Environmental Working Group (EWG) is to advise and further the mission of the Borrego Springs Watermaster to implement the Stipulated Judgment and comply with Sustainable Groundwater Management Act (SGMA) by focusing on the protection of human health and the environment. The activities of the EWG shall be approved by the Watermaster Board and will always include a nexus between environmental issues and the sustainable use of groundwater in the Borrego Springs Subbasin. Activities of the EWG could include, but are not limited to:*

- *Environmental assessment, monitoring, and habitat restoration or enhancement associated with groundwater dependent ecosystems*
- *Management of fallowed lands and the potential for participating in biological mitigation projects*
- *Addressing improperly abandoned wells*
- *Management of non-native (invasive) species for water conservation purposes*
- *Air quality monitoring*
- *Pursuit of funding opportunities*

The EWG sub-committee also defined the proposed membership structure for the EWG, the desired qualifications of EWG members, and an application process to solicit membership. The EWG was to consist of a minimum of five members, including Director Jim Bennett (County of San Diego), Director Mark Jorgensen (Community Representative), and at least three at-large members selected by the Board. To best fulfill the mission, EWG members should have a background in science and one or more of the following specialties: desert ecosystems, groundwater dependent ecosystems, hydrogeology, hydrology, and/or the local water resources and biology of the Borrego Springs Subbasin and surrounding area. Local knowledge of the Borrego Springs area and local residency are also preferred.

In December 2020, the Watermaster posted and noticed an EWG membership application to solicit membership and accepted applications through January 2021. The EWG applications were reviewed by the Board and members were appointed at the January 14, 2021 meeting. Table 12 lists the EWG members appointed by the Board and actively serving in WY 2023.

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**Table 12. Environmental Working Group Membership in WY 2023**

Member and Affiliation	Member Experience
Mark Jorgensen Community Representative	Mr. Jorgensen is a retired Park Superintendent for Anza Borrego State Park and worked for California State Parks for 30 years. He sits on the Borrego Springs Watermaster Board representing the community of Borrego Springs.
Jim Bennett, PG, CHG County of San Diego	Mr. Bennett has 23 years of experience in hydrogeology. Mr. Bennett was the manager of the development of the GSP for the Borrego Springs Groundwater Subbasin. He sits on the Borrego Springs Watermaster Board, representing the County of San Diego
Jim Dice Reserve Manager at the Steele/Burnand Anza-Borrego Desert Research Center	Mr. Dice has been Reserve Manager since the Steele/Burnand Anza-Borrego Desert Research Center opened in 2012. He retired in 2012 from California State Parks after 25 years of service with the State of California. He served as manager for San Diego State University's Santa Margarita Ecological Reserve from 1987-88 and Curator of the Desert Garden at Huntington Botanical Gardens in San Marino, California from 1981-1985.
Danny McCamish Senior Environmental Scientist for the Colorado Desert District of California State Parks	Mr. McCamish is a supervisory scientist overseeing Natural Resources Management for Colorado Desert District at California State Parks. He has 15 years of experience working in natural resources management and experience in climate change research.
John Peterson, PG, CHG Retired County Groundwater Geologist, California Professional Geologist and Certified Hydrogeologist	Mr. Peterson is a long-time resident of Borrego Springs with 40 years of experience in hydrogeology. He joined the County of San Diego as County Groundwater Geologist in 1981 and retired from the County in 2003. He also serves as Anza-Borrego Foundation Board Member.
Michael Wells, PhD Retired District Superintendent, Colorado Desert District, California Department of Parks and Recreation	Dr. Wells has over three decades of experience in natural resources management and a 34-year career with California State Parks. Dr. Wells has a PhD in physical geography from a joint program between San Diego State University and the University of California, Santa Barbara. He and his wife recently wrote a book on the natural history of the Anza-Borrego Region.

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The meetings of the EWG are open to the public. The public is afforded the opportunity to address the EWG at the beginning and end of the meetings, and during EWG discussion if requested by the EWG. Table 13 lists the EWG meeting dates and agenda topics for the reporting period. The EWG meeting materials are available on the Watermaster's [website](#)<sup>38</sup>.

**Table 13. Environmental Working Group Meetings and Topics in WY 2023**

Meeting Date and Format	Agenda Topics
January 27, 2023 (in-person)	<ul style="list-style-type: none"><li>• Status update on the Biological Restoration of Fallowed Lands project:<ul style="list-style-type: none"><li>◦ Introduction and overview on fallowed farmland</li><li>◦ Reference natural habitat and sand fence design</li><li>◦ Farmland rehabilitation strategies and prioritization</li></ul></li></ul>
September 26, 2023 (virtual)	<ul style="list-style-type: none"><li>• Status update on the Biological Restoration of Fallowed Lands project:<ul style="list-style-type: none"><li>◦ Design, research questions, and methods of Task 2 – <i>Existing Abandoned Farmland and Reference Natural Habitat Study</i></li><li>◦ Design, research questions, methods, and update of Task 3 – <i>Fallowed Farmland Brush Fence Study</i></li></ul></li><li>• Presentation on the Wildland Urban Interface Climate Action Network and opportunities for collaboration</li></ul>

### 3.4 Redetermination of Sustainable Yield

In WY 2021, in accordance with the process defined in the Judgment, the Board approved the TAC-recommended scope of work to redetermine the Sustainable Yield by January 1, 2025, which included an initial task to extend the BVHM from WY 2016 through WY 2021 and compare model-estimated groundwater pumping to the metered groundwater pumping data in the Basin newly available from the Meter Reading Program (see Section 3.1.1.2). The objective of this task was to evaluate the ability of the BVHM to accurately estimate historical and future pumping because this ability is essential to future redeterminations of the Sustainable Yield and the Rampdown rate that determines annual pumping allocations for the Judgment Parties. Watermaster began implementing the work in WY 2022, including publishing a technical memorandum (TM) documenting (i) the model results, (ii) the comparison of model-estimated pumping versus newly-metered pumping in WY 2021, and (iii) recommendations for additional model updates and/or model recalibration that are necessary to redetermine the Sustainable Yield by 2025 (West Yost, 2022b)<sup>39</sup>. In comparing model-estimated to metered groundwater pumping, the TAC identified that the model was underestimating groundwater pumping by approximately 42% and identified several other discrepancies that could directly impact the BVHM's ability to accurately estimate the water budget and Sustainable Yield. Based on the results of the BVHM extension through WY 2021, the TAC identified improving the ability of the BVHM to accurately estimate historical and future pumping as the top priority issue to address prior to the 2025 redetermination of the Sustainable Yield.

<sup>38</sup> <https://borregospringswatermaster.com/environmental-working-group/>

<sup>39</sup> Available on the Watermaster's website at: <https://borregospringswatermaster.com/wp-content/uploads/2022/12/TM-940-2021-BVHM-Extension-220921.pdf>

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To address this priority, in WY 2023, the TAC recommended a revised scope of work, schedule, and budget to complete the work through WY 2024 (see Section 3.2.3 above). The Board approved a revised scope of work and budget at its February 9, 2023 regular meeting. The scope of work is being funded by the DWR SGMA grant.

The revised scope of work to complete the redetermination of Sustainable Yield by January 2025 includes the following five tasks:

- Task 1 – Compare Farm Process (FMP)-Estimated Pumping to Actual Pumping for WY 2022
- Task 2 – Update Water-Use Factors in the FMP
- Task 3 – Correct Errors Identified in the 2021 BVHM
- Task 4 – Perform Model Recalibration
- Task 5 – Determine the Sustainable Yield

In WY 2023, Tasks 1 and 2 were completed and Task 3 was initiated, as follows:

- Task 1 – *Compare FMP-Estimated Pumping to Actual Pumping for WY 2022.* The primary objective of this work was to extend the BVHM by one additional year from WY 2021 through WY 2022 and compare FMP-estimated pumping to metered pumping data to understand the ability of the FMP to estimate pumping. The BVHM was extended through WY 2022 and then re-ran from WY 1930 through WY 2022. The model results were then evaluated to compare FMP-estimated pumping to actual metered pumping in WY 2021 and 2022. The evaluation showed that the FMP significantly underestimates groundwater pumping, which indicated that the water-use factors used in the FMP to estimate actual ET and groundwater pumping are inaccurate, and hence, the BVHM needs to be improved and recalibrated. The methods and results of performing Task 1 are documented in a TM available on the Watermaster's website.<sup>40</sup>
- Task 2 – *Update Water-Use Factors in the FMP.* The objective of this task was to develop updated estimates of the water-use factors used in the FMP to improve the ability of the FMP to estimate groundwater pumping. In this task, the water-use factors used in the FMP were evaluated and updated to more realistic/defensible values to improve the ability of the FMP to estimate pumping. The two water-use factors that were updated were: crop coefficient (KC) and on-farm efficiency (OFE), or irrigation efficiency. Using updated KC and OFE values, the BVHM was then re-run from WY 1930 through WY 2022. The model results were then evaluated to compare FMP-estimated pumping to actual metered pumping in WY 2021 and 2022. The updated KC and OFE values improved the ability of the FMP to estimate groundwater pumping in WY 2021 and 2022. The TAC recommended using the revised water use factors during Task 4 – Model Recalibration and to further evaluate historical OFE values to represent historical irrigation methods in the Basin. The methods,

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<sup>40</sup> Available on the Watermaster's website at: <https://borregospringswatermaster.com/wp-content/uploads/2023/08/III-BVHM-memo.pdf>

conclusions, and recommendations of performing Task 2 are documented in a TM available on the Watermaster's website.<sup>41</sup>

- Task 3 – *Correct Errors Identified in the 2021 BVHM*. The objective of this task was to fix known errors in the BVHM and quantify the influence of the errors on the BVHM results. In this task, the errors and discrepancies identified in the 2021 BVHM TM were corrected. These corrections included fixing errors in the Streamflow Routing, Flow and Head Boundary, and Multi-Node Well (MNW2) packages, and in the FMP. Additionally, the screen depths of wells in the MNW2 package were compared to well completion data to validate the depth distribution of pumping in the BVHM. In WY 2024, once all identified errors have been corrected, the BVHM will be run through WY 2022. The results from the corrected BVHM will be compared to the historical BVHM results to quantify the influence of the errors on the model results.

In WY 2024, Tasks 3 and 4 will be completed and a draft Sustainable Yield will be determined as part of Task 5.

### 3.5 Biological Restoration of Fallowed Lands Project

To capitalize on available grant funding for SGMA implementation, the EWG developed a scope of work<sup>42</sup> to develop data, information, and criteria to guide the use of biological restoration as a technique to mitigate the potential adverse impacts associated with the fallowing of lands (*i.e.* airborne dust emissions or introduction of invasive species) that is expected to occur within the Basin in order to meet the sustainability goal of reducing groundwater pumping. The anticipated benefits of restoring fallowed land include reduced water consumption, management of airborne dust emissions, increase natural biodiversity and habitat value, and maintain or enhance values pertinent to the Anza Borrego State Park and the residents of Borrego Springs.

The project is being administered by the EWG and performed by Land IQ. The project includes the following main tasks:

- Task 1 - Review and Analysis of Existing Data
- Task 2 - Existing Abandoned Farmland and Reference Natural Habitat Study
- Task 3 - Fallowed Farmland Brush Fence Study
- Task 4 – Farmland Fallowing Rehabilitation Strategies
- Task 5 – Farmland Fallowing Prioritization

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<sup>41</sup>Available on the Watermaster's website at: [https://borregospringswatermaster.com/wp-content/uploads/2023/08/III\\_BVHM-Task-2.pdf](https://borregospringswatermaster.com/wp-content/uploads/2023/08/III_BVHM-Task-2.pdf)

<sup>42</sup> Available on the Watermaster's website at: [https://borregospringswatermaster.com/wp-content/uploads/2023/01/Project-Submittal-Form\\_Biological-Restoration\\_com.pdf](https://borregospringswatermaster.com/wp-content/uploads/2023/01/Project-Submittal-Form_Biological-Restoration_com.pdf)

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During the reporting period, the following work was performed on Tasks 1 through 3:

- Task 1 - Review and Analysis of Existing Data. The Watermaster produced the Literature Review of the Rehabilitation of Fallowed Farmlands in Borrego Valley, California.<sup>43</sup> The Literature Review characterizes historic and current conditions of agricultural crops and practices and the natural habitat in the Basin based off a compilation of existing reports, historical maps and data, and interviews with key stakeholders and local experts in the Basin. The Literature review also includes potential strategies and information needs to inform the implementation of Tasks 2 through 5 of the scope of work and the Initial Fallowed Farmland Rehabilitation Opportunities and Prioritization Map, which is an initial prioritization map for fallowing farmland in the Basin.
- Task 2 - Existing Abandoned Farmland and Reference Natural Habitat Study. The objective of this task is to survey a range of fallowed and natural reference sites and identify drivers of biologically complex conditions. In WY 2023, Watermaster worked with the Anza-Borrego Foundation, Anza-Borrego State Park, Under the Sun Foundation, and private landowners to obtain access to nine fallowed sites to study the Basin's natural response to land fallowing. The nine sites selected were fallowed between 3 and 57 years prior. Field data and drone images were collected from these nine sites to assess the differences in vegetation (species type, cover, proportion of native vs. non-native species), soil type, geomorphology, and landscape structure.
- Task 3 - Fallowed Farmland Brush Fence Study. The objective of this task is to assess the feasibility and effectiveness of various fallowing techniques on dust mitigation and habitat recovery. In WY 2023, Watermaster identified potential study locations, began coordination with landowners to obtain access to potential study sites, and designed four fallowing techniques to construct and study in the Basin (mulch rows, scattered trees, tree fence rows, and temporary sand fence rows). The four designs are documented in a presentation given to the EWG during the September 26, 2023 EWG meeting.<sup>44</sup>

In WY 2024, the Watermaster will:

- Produce a technical memorandum summarizing the field study results from Task 2.
- Obtain land easement agreements with landowners to access study sites and construct the four fallowing technique designs to support Task 3.
- Begin work on Task 4 and Task 5.

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<sup>43</sup> Available on the Watermaster's website at: <https://borregospringswatermaster.com/wp-content/uploads/2023/06/Borrego-Lit-Review-2023-03-31-Final-with-Appendices.pdf>

<sup>44</sup> Available on the Watermaster's website at: [https://borregospringswatermaster.com/wp-content/uploads/2023/09/20230926\\_EWG-Presentation.pdf](https://borregospringswatermaster.com/wp-content/uploads/2023/09/20230926_EWG-Presentation.pdf)

### 3.6 Stakeholder Engagement

The DWR SGM Implementation Grant provides funding for public outreach and engagement efforts. Using grant funding, the Watermaster began hosting Open Houses to facilitate public outreach and provide a venue to receive public input on grant-related projects, Watermaster activities, and sustainable management of the Basin. The Open Houses are an opportunity for the public to meet with, ask questions, and have a discussion with Watermaster Staff and Board members. All Watermaster Open Houses are noticed via Watermaster's email distribution list and website.

During WY 2023, the Watermaster held two in-person Open Houses at the Borrego Springs Library. A regular, in-person Watermaster Board meeting followed each Open House. Table 14 lists the Open House meeting dates and a summary of the topics discussed for WY 2023.

**Table 14. Open Houses and Topics During the Reporting Period**

Open House Date	Topics Discussed
December 8, 2022	<ul style="list-style-type: none"><li>• Discussion on groundwater quality in the North Management Area</li><li>• A recommendation from the public to engage the community through outreach efforts to identify monitoring locations and expand the groundwater monitoring network</li><li>• Questions from the public were received on the following topics:<ul style="list-style-type: none"><li>○ Selling and acquiring water rights in accordance with the Judgment</li><li>○ Borrego Springs Watermaster's website</li><li>○ Process for electing Board Representatives</li><li>○ Historical TDS measurements in the Basin</li><li>○ Role of Watermaster Staff</li></ul></li></ul>
June 14, 2023	<ul style="list-style-type: none"><li>• Review of the results from the spring 2023 semi-annual monitoring event</li><li>• Status update on the Watermaster's effort to expand the groundwater monitoring network and public outreach efforts</li><li>• Questions from the public on the following topics:<ul style="list-style-type: none"><li>○ Changes in land ownership and BPA ownership</li><li>○ 5-year assessment of the Groundwater Management Plan</li></ul></li></ul>

## 4.0 WATER YEAR 2023 WATER RIGHTS ACCOUNTING

Watermaster is responsible for performing water rights accounting on an annual basis to track pumping, Carryover elections, transfers, and leases between the Parties, and to calculate the Adjusted Pumping Calculation on which pumping assessments for the ensuing year are based and the total allowable pumping by Party for the ensuing WY.

### 4.1 Definitions

#### *4.1.1 Judgment Terms for Water Rights Accounting*

Key definitions from the Judgment for Watermaster's water rights accounting are:

**Baseline Pumping Allocation.** BPA is the maximum allowed pumping quantity allocated to a Party (Judgment Section I.A.8). Exhibit 4 to the Judgment defines the BPA for each Party to the Judgment. Exhibit 4 is to be updated annually with any changes to BPA allocation based on Permanent Transfers of rights (see Appendix D). The total BPA is 24,293 af.

**Rampdown Rate.** The Rampdown Rate is the percentage reduction in cumulative authorized pumping of BPA effective across the Basin in any particular WY, which when subtracted from 100 percent will determine the effective Pumping Percentage (Judgment Section I.A.51). For example, the Rampdown Rate for the first five-year period is 25 percent, for a total of five percent Rampdown relative to BPA per year. The Rampdown Rate for WY 2023 is five percent. The cumulative Rampdown Rate for WYs 2021 through 2023 is 15 percent.

**Pumping Percentage.** The Pumping Percentage is the percentage of a Party's BPA that is authorized to be pumped in any particular WY, based on the pumping Rampdown percentage then in effect (Judgment Section I.A.49). For example, in WY 2023 the Pumping Percentage is 85 percent, which is a 15 percent pumping Rampdown from BPA.

**Annual Allocation.** The Annual Allocation is the maximum amount of pumping allowed by a Party in a given WY, excluding Carryover or imported water if available. The Annual Allocation for each WY will be determined by multiplying the Party's BPA by the Pumping Percentage in effect for that WY. Annual Allocation is rounded to the nearest whole af (Judgment Section I.A.51). For example, if a Party's BPA right is 418 acre-feet, the WY 2023 Annual Allocation is 355 af ( $0.85 \times 418 \text{ af} = 355.3 \text{ af}$ ).

**Carryover.** Any unused Annual Allocation may be carried over for use in subsequent water years as "Carryover", so long as the Party's assessment is paid in the current year, subject to restrictions on the amount or duration of Carryover specified in Section III.B of the Judgment. The initial maximum quantity of Carryover that a Pumper can accrue is two times the Party's BPA (Judgment Sections I.A.12 and III.B). The first Groundwater produced by a Party during any WY will be deemed to be an exercise of any Carryover (Judgment Section III.G.1).

**Permanent Transfer.** A Permanent Transfer is a transfer of BPA, including any portion of a Party's total BPA, which is permanently added to a grantee's cumulative BPA and subtracted from the grantor's BPA, and when multiplied by the pumping Rampdown percentage will establish additional Annual Allocation of the grantee in each WY (less any water pumped in that year by the selling Party) and thereafter (Judgment Section I.A.42).

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**Lease.** A Lease is a transfer of Annual Allocation or Carryover for one WY or for several WYs, as set forth in a written lease agreement (Judgment Section I.A.32).

**Adjusted Pumping Calculation.** The Adjusted Pumping Calculation is the basis of establishing each Party's pumping assessment and is defined in Section IV.E.4 of the Judgment. Section IV.E.4 establishes that the annual Watermaster Budget will be funded through the establishment of an annual uniform pumping assessment (expressed in \$/af of pumping). The Adjusted Pumping Calculation is computed for all Parties with BPA rights and for the two parties with other non-De Minimis water rights (ABDSP and BSUSD).

Watermaster calculates each Party's annual Adjusted Pumping Calculation in af as follows:

$$\begin{aligned} &+ \text{Total Pumping by Party (af)} \\ &+ \text{Total Pumping by Party's Lessee (af)} \\ &- \text{Amount of Carryover Pumped by Party (af)} \\ &- \text{Amount of Annual Allocation or Carryover Leased from Others and Pumped by Party (af)} \\ &+ \text{Carryover Election (af)} \\ \hline &= \text{Adjusted Pumping Calculation (af)} \end{aligned}$$

**Overproduction.** Overproduction is pumping by a Party in any particular WY that is in excess of the sum of the Party's Annual Allocation plus any leased Annual Allocation plus any accrued Carryover (Judgment Section I.A.38). Overproduction up to the Maximum Over Production Limit must be covered within one year of the Overproduction, either by using less Annual Allocation (e.g., under-pumping the allowable pumping limit afforded by Annual Allocation) or applying Carryover in the subsequent WY or by Lease or Permanent Transfer. If Overproduction is not covered by one of these means by the end of the subsequent WY, an Overproduction Penalty Assessment applies. For example, a Party that engages in Overproduction in WY 2025 has until the end of WY 2026 to remedy the Overproduction through the means stated herein.

**Special Rules for Overproduction during the first three Water Years.** Under Judgment section III.G.1, 2 and 3, special rules apply to Overproduction in the first 3 Water Years (WY 2021, WY 2022, and WY 2023). During the first three Water Years, no Party will be subject to an immediate Overproduction Penalty Assessment so long as such Party's total cumulative Overproduction in those Water Years does not exceed the Maximum Overproduction Limit. The Maximum Overproduction Limit is 20 percent of a Party's cumulative Annual Allocation for WY 2021 through WY 2023. Any Party that engages in Overproduction in any of the first three WYs that does not exceed the Maximum Overproduction Limit will be notified by the Watermaster of the amount of Overproduction annually following the end of the Water Year. The Party engaging in Overproduction shall cover the cumulative quantity of its Overproduction that occurred in WY 2021, WY 2022 and WY 2023 by the end of WY 2025 through either Carryover, reduced production below the authorized Annual Allocation in WY 2024 and WY 2025, or through lease or permanent transfer. If the Party has not covered its Overproduction from WY 2021, WY 2022 and WY 2023 by the end of WY 2025 (September 30, 2025), an Overproduction Penalty Assessment will be assessed to the Party.

If Overproduction in any of the first three WYs exceeds the Maximum Overproduction Limit, an Overproduction Penalty Assessment applies for the Overproduction amount in excess of the Maximum Overproduction Limit unless such Overproduction in excess of the Maximum Overproduction Limit is covered and cured through under-pumping, Carryover, Lease, or Permanent Transfer for all such Overproduction during the subsequent WY. For example, a Party that engages in Overproduction in excess of the Maximum Overproduction Limit in WY 2021 has until the end of WY 2022 to remedy the excess Overproduction through the means stated herein.

#### **4.1.2 Additional Terminology for Water Rights Accounting**

In addition to the definitions from the Judgment, the following terminology are used by the Watermaster to support the Water Rights accounting.

**Other Non-De Minimis Water Rights.** This is the term used to refer to the Judgment-defined water rights of the ABDSP (20 afy) and the BSUSD (22 afy) that are not BPA rights. This terminology is used to distinguish them from BPA rights. Although these rights do not qualify for Carryover and cannot be leased or transferred, the pumping pursuant to them must be considered in the Adjusted Pumping Calculation and in assessing Overproduction. The ABDSP and BSUSD are called Parties with non-De Minimis rights.

**Total Allowable Pumping.** The total allowable pumping in a particular WY is the total amount of pumping that a Party can do without triggering Overproduction rules. The total allowable pumping is computed as follows:

- For BPA Parties: the total allowable pumping is the sum of the WY Annual Allocation plus (or less than) any transfers and leases of Annual Allocation plus any available Carryover account balance at the beginning of the WY.
- For Parties with non-De Minimis rights: the total allowable pumping is the sum of the non-De Minimis Water rights plus any transfers and leases of Annual Allocation.

## **4.2 Permanent Transfers and Leases**

Pursuant to Section III.I of the Stipulated Judgment, all Parties have the option for a Permanent Transfer or Lease of BPA, Annual Allocation, or Carryover Rights. Each type of Transfer is described in the sections below.

Parties who elect to transfer BPA, Annual Allocation, or Carryover Rights are required to identify the total volume transferred, the term of the Transfer, the Party responsible for payment of applicable pumping assessments, and identify the assigned parcels and wells that the transferred water may be used at. All Transfers and Leases are reviewed by Watermaster staff to ensure compliance with the terms of the Judgment (such as compliance with minimum fallowing standards) and documented on Watermaster-approved forms<sup>45</sup>. Once the Transfer or Lease documents are complete and executed by

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<sup>45</sup> <https://borregospringswatermaster.com/pumper-resources/>. See Forms for Documentation and Approval of Water Rights Transfers.

the parties to the Transfer or Lease, Watermaster, and Legal Counsel, the Transfers or Leases are submitted to the Board to receive and file as part of a Consent Calendar action.

#### **4.2.1 Permanent Transfers of BPA**

Section III.I of the Judgment describes the provisions for Permanent Transfer of BPA. During WY 2023, there were four permanent Transfers of BPA, totaling 1,997.3 af. The Transfers included:

- The Springs RV and Golf Resort transferred 25.3 af (a portion of the Springs entire BPA) to the BWD. The transfer does not include transfer of a BPA parcel.
- David and Juli Bauer, co-trustees of the D & J Bauer Family Trust 11-18-04 transferred 415 af of BPA to the BWD. The transfer includes transfer of BPA, a BPA parcel, and one well. No Carryover water previously purchased by D & J Bauer was transferred to BWD as part of the transaction. The transferred BPA and BPA Parcel represents only a portion of the entire BPA held by D & J Bauer. The BWD ultimately intends to fallow the BPA Parcel in accordance with the Judgment fallowing standards and transfer the BPA rights to be accounted together with its primary BPA rights. Until the land is fallowed, the BPA purchased by BWD (and any Carryover elected) remains attached to the subject BPA Parcel and can only be pumped for use on that BPA Parcel. Thus, the BPA transferred to the BWD is shown as a new stand-alone entry in Exhibit 4 of the Judgment and is not yet benefitted by the same special provisions afforded by the Judgment for the BWD's primary BPA.
- William M. Bauer transferred 670 af of BPA and its associated BPA parcel and wells to the BWD. This represents the entirety of W. Bauer's BPA rights, including all Carryover rights (note that the transfer of W. Bauer's remaining Carryover water to the BWD was documented as a separate transfer to the BWD). The BWD ultimately intends to fallow the BPA Parcel in accordance with the Judgment fallowing standards and transfer the BPA rights to be accounted together with its primary BPA rights. Until the land is fallowed, the BPA purchased by BWD (and any Carryover elected) remains attached to the subject BPA Parcel and can only be pumped for use on that BPA Parcel. Thus, the BPA transferred to the BWD is shown as a new stand-alone entry in Exhibit 4 of the Judgment and is not yet benefitted by the same special provisions afforded by the Judgment for the BWD's primary BPA.
- 887 af of BPA was automatically transferred from John Doljanin to T2 Palms, LLC through a foreclosure action. At the time of the transfer, Doljanin was not in good standing with the Watermaster due to non-payment of the Water Year 2023 Pumping Assessments. Additionally, at the time of the foreclosure action, T2 Palms, LLC was not a Party to the Judgment. T2 Palms, LLC has filed a motion to intervene into the Judgment that will be heard by the Court in WY 2024. T2 Palms, LLC will have the ability to exercise its water rights upon Court approval of the intervention and upon payment of all past due assessments associated with the BPA Parcel.

Appendix D of this Annual Report contains the updated Exhibit 4 listing of BPA by Party as of October 1, 2023. The most current version of Exhibit 4 is also available on the Watermaster's website.

#### **4.2.2 Leases of Annual Allocation**

Parties may Lease part or all of their Annual Allocation to another Party (BPA or Non-De Minimis) for a specific WY. In the Lease of Annual Allocation, the BPA right is retained by the Lessor. Parties that Lease Annual Allocation have the option to include the Allocation's Carryover Rights as part of the transaction. For Leases where the Transferor elects to include Carryover Rights in the Transfer, the Transferee may make an election of a portion of or all of the associated Carryover from any unpumped Annual Allocation leased (subject to limits on Carryover). For Leases where the Transferor elects to exclude Carryover rights from the transfer of Annual Allocation, the Transferor may make an election of a portion of or all of the associated Carryover from any unpumped Annual Allocation transferred (subject to limits on Carryover).

There were no Leases of Annual Allocation among Parties during WY 2023.

#### **4.2.3 Transfers of Carryover Rights**

Parties may Transfer Carryover to another Party (BPA or Non-De Minimis). Transfers of Carryover are subject to the limits established by the Judgment, including that Carryover is the first water pumped each year and the maximum amount of Carryover allowed to be held by a Party is two times the Party's BPA.

During WY 2023, there were two Transfers of Carryover Rights not associated with permanent transfers of BPA, totaling 49.55 af. Table 15 identifies the Transfers of Carryover Rights that occurred in WY 2023.

**Table 15. Transfers of Carryover Rights in WY 2023**

Transferor	Transfer Amount	Transferee
T2 Borrego, LLC	30 af	Gamini D. Weerasekera
BWD <sup>46</sup>	19.55 af	BSUSD

### **4.3 Adjusted Pumping Calculation for WY 2023**

To support the estimation of the Adjusted Pumping Calculations by October 15<sup>th</sup> of each new WY, Watermaster is required to submit a notice to each Party of its total prior WY pumping, the amount of Carryover pumped, the amount of any Leases and Transfers pumped, and the maximum amount of Annual Allocation eligible for Carryover from the preceding WY. The report must also provide an estimate of the Pumping Assessment for the ensuing WY to support the Parties' elections to Carryover or not pump. The schedule in Section IV.E.4 of the Judgment also prescribes that all elections to Carryover or to not pump must be reported to the Watermaster by October 31<sup>st</sup> of each new WY.

Watermaster completed the WY 2023 water rights accounting in November 2023 and reported it to the Board at its November 9, 2023 regular Board meeting. Table 16 shows the summary of the WY 2023 water rights accounting for each Party to the Judgment, including the Parties with BPA rights and the Parties with other non-De Minimis rights (ABDSP and BSUSD). The table includes detailed footnotes on how each column of information is obtained or calculated. Table 16 shows:

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<sup>46</sup> BWD (Purchase from W. Bauer and attached to APN 140-010-08)

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- The BPA and Non-De Minimis rights of each Party as of the end of the prior WY – September 30, 2022 [see column (a)]. The total of BPA plus other Non-De Minimis rights was 24,335 af:
  - Total BPA is 24,293 af
  - Total other Non-De Minimis rights for ABDSP and BSUSD is 42 af
- The permanent transfers of BPA that occurred in WY 2023 [see column (b)]. A total of 1,997 af of water was permanently transferred between Parties, as described in Section 4.2.1.<sup>47</sup>
- The BPA and Non-De Minimis rights of each Party as of the start of the current WY – October 1, 2023 [see column (c)<sup>48</sup>]. The total of BPA plus other Non-De Minimis rights remain the same as in column (a).
- The Maximum Allowable Carryover Account limit of each Party based on their BPA rights as of WY 2023 [see column (d)<sup>49</sup>]. The Maximum Allowable Carryover Account limit of all Parties was 48,586 af:
  - The Carryover limit of BPA Parties is 48,586 af (= 2 x 24,293 af)
  - The Carryover limit of ABDSP and BSUSD is 0, as their rights are not eligible for Carryover
- The Carryover account balance of each Party at the start of WY 2023 [see column (e)]. The total Carryover account balance at the start of WY 2023 was 14,552.04 af:
  - The Carryover account balance of BPA Parties is 14,552.04 af
  - The Carryover account balance of ABDSP and BSUSD is 0, as their rights are not eligible for Carryover
- The cumulative Maximum Overproduction Limit of each Party for WYs 2021 to 2023 [see column (f)<sup>50</sup>]. The cumulative Maximum Overproduction Limit of all Parties is 13,145 af.
- The balance of Overproduction for each Party at the beginning of WY 2023 [see column (g)]. The balance of Overproduction was 139.54 af:
  - The total Overproduction balance of BPA Parties was 119.99 af
  - The total Overproduction balance of ABDSP and BSUSD was 19.55 af
- The portion of Overproduction to be resolved by each Party by September 30, 2023 due to Overproduction in excess of the three-year cumulative Maximum Overproduction Limit [see column (h)<sup>51</sup>]. The total Overproduction to be resolved by September 30, 2023 was 26.61 af:
  - The total BPA Party Overproduction to be resolved by September 30, 2023 was 20.26 af

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<sup>47</sup> The net of transfers of BPA is always 0 af, as seen on the Totals line of Table 16 for column (b).

<sup>48</sup> (c) = (a) + (b)

<sup>49</sup> (d) = 2 x (c)

<sup>50</sup> For each Pumper, the Maximum Overproduction Limit for WYs 2021 to 2023 is calculated as follows: = (20% x WY 2021 Annual Allocation) + (20% x WY 2022 Annual Allocation) + (20% x WY 2023 Annual Allocation). The WY 2021, 2022, and 2023 Annual Allocations are based on a 5 percent, 10 percent, and 15 percent Rampdown Rate, respectively (e.g. Pumping Percentages of 95, 90, and 85 percent, respectively).

<sup>51</sup> (h): if (g) > (f), then (h) = (g) - (f), otherwise (h) = 0

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- The total ABDSP and BSUSD Overproduction to be resolved by September 30, 2023 was 6.35 af
- The portion of Overproduction Balance to be resolved by each Party by September 30, 2025 due to Overproduction in that is less than the three-year cumulative Maximum Overproduction Limit [see column (i)<sup>52</sup>]. The total Overproduction to be resolved by September 30, 2025 was 112.93 af:
  - The total BPA Party Overproduction to be resolved by September 30, 2025 was 99.73 af
  - The total ABDSP and BSUSD Overproduction to be resolved by September 30, 2025 was 13.20 af
- The WY 2023 Pumping Allocation of each Party [see column (j)]. The total WY 2023 Pumping Allocation was 20,694 af:
  - The Annual Allocation for BPA parties was 20,652 af (85 percent of BPA)<sup>53</sup>
  - The allocation for ABDSP and BSUSD was 42 af
- The Leases of Annual Allocation for each Party [see column (k)]. A total of 0 af was Leased among BPA Parties in WY 2023, as described in Section 4.2.2.<sup>54</sup>
- The total Carryover Leased or Transferred among BPA Parties in WY 2023 [see column (l)]. A total of 798.44 af Carryover was Transferred among BPA Parties, through Permanent Transfers of BPA or Transfers of Carryover, as described in Sections 4.2.1 and 4.2.3.<sup>55</sup>
- The total allowable pumping of each Party for WY 2023 [see column (m)<sup>56</sup>]. The total allowable pumping of all Parties was 35,106.50 af<sup>57</sup>:
  - The WY 2023 allowable pumping for BPA parties was 35,064.50 af
  - The WY 2023 allowable pumping for ABDSP and BSUSD was 42 af
- The total pumping by each Party in WY 2023 [see column (n)]. The total pumping by all Parties in WY 2023 was 10,403.38 af:
  - Total pumping by BPA Parties was 10,377.03 af
  - Total pumping by ABDSP and BSUSD was 26.35 af
- The total amount of Carryover pumped by each Party in WY 2023 [see column (p)<sup>58</sup>]. The total amount of Carryover pumped by each Party in WY 2023 was 7,003.82 af:

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<sup>52</sup> (i) = (g) - (h)

<sup>53</sup> Each parties individual BPA is multiplied by 0.85 and then rounded to the nearest whole number. These number are then summed to get a value of 20,652.

<sup>54</sup> The net of Leases and Transfers across all Parties is always 0 af, as seen on the Totals line of Table 16 for column (k).

<sup>55</sup> The net of Leases and Transfers across all Parties is always 0 af, as seen on the Totals line of Table 16 for column (l).

<sup>56</sup> (m) = (e) + (j) + (k) + (l) - (g)

<sup>57</sup> The total allowable pumping for WY 2023 is the sum of the Carryover account balance plus the Annual Allocation plus any leased/transferred Allocation or Carryover less the total balance of Overproduction.

<sup>58</sup> Recall that the first water pumped each year is Carryover, thus, If (e) >0, then (p) = minimum of [(e)+(l)] or (n)

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- Total Carryover pumped by BPA Parties was 7,003.82 af
- Total pumping by ABDSP and BSUSD was 0 af<sup>59</sup>
- The new balance of Overproduction as of the end of WY 2023 for each Party af [see column (q)<sup>60</sup>]. The new balance of Overproduction as of the end of WY 2023 was 193.02:
  - Overproduction by the BPA Parties was 193.02 af; two Parties pumped in excess of their Maximum Overproduction Limit for WYs 2021 through 2023
  - 44.20 af of the total Overproduction must be resolved by September 30, 2024 [see column (r)<sup>61</sup>]
  - 148.82 af of the total Overproduction must be resolved by September 30, 2025 [see column (s)<sup>62</sup>]
  - Overproduction by ABDSP and BSUSD was 0 af
- The Annual Allocation eligible for Carryover to WY 2024 by each BPA Party [see column (t)<sup>63</sup>]. The total Annual Allocation eligible for Carryover to WY 2024 was 16,779.58 af.
- The Annual Allocation eligible for Carryover to WY 2024 by each BPA Party [see column (u)<sup>64</sup>]. The total election of Carryover to WY 2024 was 13,825.38 af, which is 82 percent of the eligible Carryover.
- The total Carryover Account Balance of each Party at the end of WY 2023[see column (v)<sup>65</sup>]. The total Carryover Account Balance was 21,354.06 af.
- The Adjusted Pumping Calculation of each Party for WY 2023 [see column (w)<sup>66</sup>]. The total Adjusted Pumping Calculation for determining the Assessment rate for WY 2024 was 17,224.95 af:
  - The Adjusted Pumping Calculation of the BPA Parties was 17,198.59 af
  - The Adjusted Pumping Calculation of ABDSP and BSUSD was 26.35 af

Notable conclusions from the water rights accounting for WY 2023 include:

- The total pumping by all Parties in WY 2023 was about 50 percent less than the Annual Allocation of 20,694 af, which is based on an 85% rampdown of BPA. Thus, the reduction in pumping is significantly ahead of the Rampdown schedule.

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<sup>59</sup> Non-De Minimis Parties can pump Carryover that is leased to them by a BPA Party.

<sup>60</sup>  $(q) = \text{If } (n) > (e) + (j) + (k) + (l) - (g), \text{ then } (n) - [(e) + (j) + (k) + (l) - (g)], \text{ otherwise } 0$

<sup>61</sup>  $(r): \text{if } (q) > (f), \text{ then } (r) = (q) - (f), \text{ otherwise } (r) = 0$

<sup>62</sup>  $(s) = (q) - (r)$

<sup>63</sup> *If no Overproduction, (t) = (j) + (k) - [(n) - (p)]*

<sup>64</sup> The Carryover Election is not a calculated value, it is an amount elected by each BPA Party. This is the sum of all elected Carryover by each Party.

<sup>65</sup>  $(v) = (e) + (l) - (p) + (u)$

<sup>66</sup>  $(w) = (n) - (k) - (p) + (u)$

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- The accounting process provides for a transparent demonstration that the Carryover provisions of the Judgment are being implemented as intended, such that Carryover is the first water produced each year, and that Carryover elections are being managed to ensure that no Party has more than 2x BPA held as Carryover.

Table 16 - WY 2023 Water Rights Accounting Summary for the Borrego Springs Subbasin - (all values in acre-feet)

	BPA or Other Non-De Minimis Rights as of Sep 30, 2022 <sup>1</sup>	Permanent Transfer of BPA <sup>1,2</sup> effective in WY 2023	BPA or Other Non-De Minimis Rights as of Oct 1, 2023	Maximum Allowable Carryover Account Balance <sup>3,1</sup>	Cumulative Max Over-production Limit for WYs 2021-2023 <sup>4</sup>	Balance of Over-production as of Oct 1, 2022 <sup>5</sup>	Portion of Over-production Balance to Resolve Effective Sept 30, 2023 <sup>6</sup>	WY 2023 Annual Allocation per Rampdown: 85% of BPA <sup>7</sup> ; 100% of non-BPA rights <sup>8,1</sup>	Leased or Transferred Annual Allocation Effective in WY 2023 <sup>2</sup>	Leased or Transferred Carryover Effective in WY 2023 <sup>9</sup>	Total Allowable Pumping for WY 2023 <sup>9</sup>	Total Pumping in WY 2023	WY 2023 Pumping was Metered or Estimated <sup>10</sup>	Carryover Pumped in WY 2023 <sup>11,1</sup>	Balance of Over-production as of September 30, 2023	Balance of Over-production to Resolve by Sept 30, 2024 <sup>13</sup>	Balance of Over-production to Resolve by Sept 30, 2025 <sup>13</sup>	Pumping Allocation Eligible for Carryover <sup>14</sup>	Carryover Election by Party	Carryover Account Balance as of October 1, 2023	WY 2023 Adjusted Pumping Calculation			
	(a)	(b)	(c) = (a) + (b)	(d) = 2 x (c)	(e)	(f) = 20% of Annual Allocation in WYs 21, 22, 23	(g)	(h): if (g) > (f), then (h) = (g) - (f), otherwise (h) = 0	(i) = (g) - (h)	For BPA Parties: (j) = 0.85 x (c) For other Parties: (d) = (c)	(k)	(l)	(m) = (e) + (j) + (k) + (l) - (g)	(n)	(o)	(p) <sup>11</sup>	(q) <sup>12</sup>	(r): if (q) > (f), then (r) = (q) - (f), otherwise (r) = 0	(s) = (q) - (r)	(t) <sup>14</sup>	(u)	(v) = (e) + (l) - (p) + (u)	(w) = (n) - (k) - (p) + (u)	
<b>TOTALS</b>	<b>24,335</b>	<b>0.00</b>	<b>24,335</b>	<b>48,586</b>	<b>14,552.04</b>	<b>13,145</b>	<b>139.54</b>	<b>26.61</b>	<b>112.93</b>	<b>20,694</b>	<b>0.00</b>	<b>0.00</b>	<b>35,106.50</b>	<b>10,403.38</b>		<b>7,003.82</b>	<b>193.02</b>	<b>44.20</b>	<b>148.82</b>	<b>16,779.58</b>	<b>13,825.38</b>	<b>21,354.06</b>	<b>17,224.95</b>	
<b>BPA Parties</b>																								
<b>BPA Party Subtotal</b>	<b>24,293</b>	<b>0</b>	<b>24,293</b>	<b>48,586.00</b>	<b>14,552.04</b>	<b>13,119.80</b>	<b>119.99</b>	<b>20.26</b>	<b>99.73</b>	<b>20,652.00</b>	<b>0.00</b>	<b>-19.55</b>	<b>35,064.50</b>	<b>10,377.03</b>		<b>7,003.82</b>	<b>193.02</b>	<b>44.20</b>	<b>148.82</b>	<b>16,779.58</b>	<b>13,825.38</b>	<b>21,354.06</b>	<b>17,198.59</b>	
Agri-Empire	574	0	574	1,148	0.00	310.00	0.00	0.00	0.00	488.00	0.00	0.00	488.00	0.00	Metered	0.00	0.00	0.00	0.00	488.00	0.00	0.00	0.00	
Rick and Joan Anson, co-trustees of the Anson Family Trust 08-18-08	2	0	2	4	0.00	1.20	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	na	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	
Alan & Tracy Asche	5	0	5	10	8.35	2.80	0.00	0.00	0.00	4.00	0.00	0.00	12.35	1.33	Metered	1.33	0.00	0.00	0.00	2.98	2.98	10.00	2.98	
Gary D. & Darlis A. Bailey	7	0	7	14	4.48	3.80	0.00	0.00	0.00	6.00	0.00	0.00	10.48	7.12	Metered	4.48	0.00	0.00	0.00	3.36	3.36	3.36	6.00	
David and Juli Bauer, co-trustees of the D&J Bauer Family Trust 11-18-04	1,826	-415	1,411	2,822	772.14	761.80	0.00	0.00	0.00	1,199.00	0.00	0.00	1,971.14	913.32	Metered	772.14	0.00	0.00	0.00	1,057.82	700.00	700.00	841.18	
BWD (Purchase from D & J Bauer and attached to APN 140-070-18) <sup>(A)</sup>	0	415	415	830	0.00	224.20	0.00	0.00	0.00	353.00	0.00	0.00	353.00	0.00	na	0.00	0.00	0.00	0.00	353.00	353.00	353.00	353.00	
William M. Bauer <sup>(B)</sup>	670	-670	0	0	494.08	0.00	0.00	0.00	0.00	0.00	0.00	-458.98	35.10	35.10	Metered	35.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
BWD (Purchase from W. Bauer and attached to APN140-010-08) <sup>(B),(C)</sup>	0	670	670	1,340	0.00	362.00	0.00	0.00	0.00	570.00	0.00	439.43	1,009.43	0.00	na	0.00	0.00	0.00	0.00	570.00	570.00	1,009.43	570.00	
Borrego Air Ranch Mutual Water & Improvement Co.	12	0	12	24	6.13	6.40	0.00	0.00	0.00	10.00	0.00	0.00	16.13	6.85	Metered	6.13	0.00	0.00	0.00	9.28	9.28	9.28	10.00	
Borrego Nazareth LLC	1,462	0	1,462	2,924	1,330.66	789.60	0.00	0.00	0.00	1,243.00	0.00	0.00	2,573.66	45.39	Estimated (P)	45.39	0.00	0.00	0.00	1,243.00	46.00	1,331.27	46.00	
Borrego Water District	2,563	25.3	2,588.30	5,177	1,684.70	1,397.60	0.00	0.00	0.00	2,200.00	0.00	0.00	3,884.70	1,516.10	Metered	1,516.10	0.00	0.00	0.00	2,200.00	2,200.00	2,368.60	2,200.00	
Carpenter Family Trust 12-11-07	6	0	6	12	3.98	3.20	0.00	0.00	0.00	5.00	0.00	0.00	8.98	7.94	Metered	3.98	0.00	0.00	0.00	1.04	1.04	1.04	5.00	
Conzelman/Jensen/Sommerville Family Trusts	4,741	0	4,741	9,482	1,473.39	2,560.20	0.00	0.00	0.00	4,030.00	0.00	0.00	5,503.39	2,537.96	Metered	1,473.39	0.00	0.00	0.00	2,965.43	2,965.43	2,965.43	4,030.00	
Desert Farm LLC, Crumrine Family Trust 04-19-06	21	0	21	42	0.00	11.40	0.54	0.00	0.54	18.00	0.00	0.00	17.46	13.94	Metered	0.00	0.00	0.00	0.00	4.06	4.06	4.06	18.00	
CWC Casa Del Zorro LLC	22	0	22	44	0.00	12.00	10.81	0.00	10.81	19.00	0.00	0.00	8.19	27.76	Metered	0.00	19.57	7.57	12.00	0.00	0.00	0.00	27.76	
De Anza Desert Country Club	957	0	957	1,914	126.61	516.60	0.00	0.00	0.00	813.00	0.00	0.00	939.61	508.28	Metered	126.61	0.00	0.00	0.00	431.33	431.33	431.33	813.00	
John B. & Silvia H. Hogan	8	0	8	16	3.63	4.40	0.00	0.00	0.00	7.00	0.00	0.00	10.63	4.51	Metered	3.63	0.00	0.00	0.00	6.12	6.12	6.12	7.00	
John Doljanin <sup>(D),(E)</sup>	887	-887	0	0	471.88	0.00	0.00	0.00	0.00	0.00	0.00	-309.46	162.42	162.42	Metered	162.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
T2 Palms, LLC <sup>(D)</sup>	0	887	887	1,774	0.00	479.00	0.00	0.00	0.00	754.00	0.00	309.46	1,063.46	0.00	na	0.00	0.00	0.00	0.00	754.00	0.00	309.46	0.00	
Genus L.P.	112	0	112	224	0.00	60.40	0.00	0.00	0.00	95.00	0.00	0.00	95.00	0.00	na	0.00	0.00	0.00	0.00	95.00	0.00	0.00	0.00	
JM Roadrunner, LLC	1,594.87	0	1,594.87	3,190	1,348.95	861.20	0.00	0.00	0.00	1,356.00														

Table 16 - WY 2023 Water Rights Accounting Summary for the Borrego Springs Subbasin - (all values in acre-feet)

	BPA or Other Non-De Minimis Rights as of Sep 30, 2022 <sup>1</sup>	Permanent Transfer of BPA <sup>1,2</sup> effective in WY 2023	BPA or Other Non-De Minimis Rights as of Oct 1, 2023	Maximum Allowable Carryover Account Balance <sup>3,1</sup>	Carryover Account Balance as of Oct 1, 2022 <sup>3,1</sup>	Cumulative Max Over-production Limit for WYs 2021-2023 <sup>4</sup>	Portion of Over-production Balance to Resolve Effective Sept 30, 2023 <sup>6</sup>	WY 2023 Annual Allocation per Rampdown: 85% of BPA <sup>7</sup> ; 100% of non-BPA rights <sup>8,1</sup>	Leased or Transferred Annual Allocation Effective in WY 2023 <sup>2</sup>	Leased or Transferred Carryover Effective in WY 2023 <sup>2</sup>	Total Allowable Pumping for WY 2023 <sup>9</sup>	Total Pumping in WY 2023	WY 2023 Pumping was Metered or Estimated <sup>10</sup>	Carryover Pumped in WY 2023 <sup>11,1</sup>	Balance of Over-production as of September 30, 2023	Balance of Over-production to Resolve by Sept 30, 2024 <sup>13</sup>	Balance of Over-production to Resolve by Sept 30, 2025 <sup>13</sup>	Pumping Allocation Eligible for Carryover <sup>14</sup>	Carryover Election by Party	Carryover Account Balance as of October 1, 2023	WY 2023 Adjusted Pumping Calculation													
	BPA Party or Party with Other Non-De Minimis Water Rights						$(f) = 20\% \text{ of Annual Allocation in WYs 21, 22, 23}$		$(h):$ $\text{if } (g) > (f), \text{ then } (h) = (g) - (f), \text{ otherwise } (h) = 0$		$(i) = (g) - (h)$		$(m) = (e) + (j) + (k) + (l) - (g)$		$(n)$		$(o)$		$(p)^{11}$		$(q)^{12}$		$(r):$ $\text{if } (q) > (f), \text{ then } (r) = (q) - (f), \text{ otherwise } (r) = 0$		$(s) = (q) - (r)$		$(t)^{14}$		$(u)$		$(v) = (e) + (l) - (p) + (u)$		$(w) = (n) - (k) - (p) + (u)$	
(a)	(b)	(c) = (a) + (b)	(d) = 2 x (c)	(e)	(g)	(i)	(d) = (c)	(k)	(l)	(n)	(o)	(p) <sup>11</sup>	(q) <sup>12</sup>	(r)	(s)	(t)	(u)	(v)	(w)															
Seley Ranches, L.P.	2,226	0	2,226	4,452	896.84	1,202.00	0.00	0.00	0.00	1,892.00	0.00	0.00	2,788.84	<b>1,247.92</b>	Metered	896.84	0.00	0.00	0.00	1,540.92	1,540.92	1,892.00												
Soli Organic Inc.	61	0	61	122	0.00	33.00	6.56	0.00	6.56	52.00	0.00	0.00	45.44	<b>74.43</b>	Metered	0.00	28.99	0.00	28.99	0.00	0.00	0.00	74.43											
Max Siefker	2	0	2	4	0.00	1.20	0.00	0.00	0.00	2.00	0.00	0.00	2.00	<b>0.00</b>	na	0.00	0.00	0.00	0.00	ne	0.00	0.00	0.00											
Brian Siefker Trust 12-18-01	3	0	3	6	0.00	1.80	0.00	0.00	0.00	3.00	0.00	0.00	3.00	<b>0.00</b>	na	0.00	0.00	0.00	0.00	ne	0.00	0.00	0.00											
Smith Kent R. Revocable Living Trust 01-04-90	50	0	50	100	75.00	27.20	0.00	0.00	0.00	43.00	0.00	0.00	118.00	<b>0.00</b>	na	0.00	0.00	0.00	0.00	25.00	25.00	100.00	25.00											
The Springs RV and Golf Resort, LP	287	-25.3	261.70	523	94.08	141.40	0.00	0.00	0.00	222.00	0.00	0.00	316.08	<b>108.82</b>	Metered	94.08	0.00	0.00	0.00	207.26	207.26	222.00												
T2 Borrego, LLC	965	0	965	1,930	1,663.34	521.20	0.00	0.00	0.00	820.00	0.00	-30.00	2,453.34	<b>0.00</b>	na	0.00	0.00	0.00	0.00	296.66	296.66	1,930.00	296.66											
T2 Borrego, LLC - Ram's Hill	2,536	0	2,536	5,072	3,304.71	1,369.40	0.00	0.00	0.00	2,156.00	0.00	0.00	5,460.71	<b>464.66</b>	Metered	464.66	0.00	0.00	0.00	2,156.00	2,156.00	4,996.05	2,156.00											
T2 Farms LLC	485	0	485	970	273.41	262.00	0.00	0.00	0.00	412.00	0.00	0.00	685.41	<b>237.95</b>	Metered	237.95	0.00	0.00	0.00	412.00	412.00	447.46	412.00											
Bagdasarian Farms, LLC	1,142	0	1,142	2,284	244.08	616.80	0.00	0.00	0.00	971.00	0.00	0.00	1,215.08	<b>1,054.41</b>	Metered	244.08	0.00	0.00	0.00	160.67	160.67	160.67	971.00											
Joel Vanasden	36	0	36	72	34.00	19.40	0.00	0.00	0.00	31.00	0.00	0.00	65.00	<b>0.00</b>	na	0.00	0.00	0.00	0.00	31.00	31.00	65.00	31.00											
Michael C. Ward, Sr. Revocable Trust 10-05-17	82	0	82	164	119.77	44.40	0.00	0.00	0.00	70.00	0.00	0.00	189.77	<b>6.15</b>	Metered	6.15	0.00	0.00	0.00	50.38	0.00	113.62	0.00											
Wisdom Gabriel B & Weiss-Wisdom Diana Family 2008 Trust 08-01-08	1	0	1	2	2.00	0.60	0.00	0.00	0.00	1.00	0.00	0.00	3.00	<b>0.00</b>	na	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00											
Wright Family Living Trust 06-19-89	158	0	158	316	0.00	85.20	24.86	0.00	24.86	134.00	0.00	0.00	109.14	<b>158.43</b>	Estimated	0.00	49.29	0.00	49.29	ne	0.00	0.00	158.43											
Ashley Bilyk and Lee Tyler Bilyk	18.13	0	18.13	36.26	13.10	9.60	0.00	0.00	0.00	15.00	0.00	0.00	28.10	<b>1.88</b>	Metered	1.88	0.00	0.00	0.00	15.00	15.00	26.22	15.00											
<b>Parties with Other Non-De Minimis Water Rights</b>																																		
<b>Other Party Subtotal</b>	<b>42</b>	<b>0</b>	<b>42</b>	<b>na</b>	<b>na</b>	<b>25.20</b>	<b>19.55</b>	<b>6.35</b>	<b>13.20</b>	<b>42.00</b>	<b>0.00</b>	<b>19.55</b>	<b>42.00</b>	<b>26.35</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>na</b>	<b>na</b>	<b>26.35</b>												
Borrego Springs Unified School District <sup>[F]</sup>	22	na	22	na	na	13.20	19.55	6.35	13.20	22.00	0.00	19.55	22.00	<b>17.56</b>	Metered	0.00	0.00	0.00	0.00	na	na	na	17.56											
Anza Borrego Desert State Park	20	na	20	na	na	12.00	0.00	0.00	0.00	20.00	0.00	0.00	20.00	<b>8.79</b>	Metered	0.00	0.00	0.00	0.00	na	na	na	8.79											

(1) The Judgment establishes separate, non-BPA pumping rights for two entities—the Anza Borrego Desert State Park (ABDSP) and the Borrego Springs Unified School District (BSUSD). These non-BPA rights are not subject to pumping Rampdown, Carryover, or transfer (to other Parties), but are subject to all other substantive provisions of the Judgment, including paying pumping assessments based on annual pumping and the ability to purchase/lease Annual Allocation or Carryover to cover Overproduction.

(2) A negative transfer value indicates rights transferred to another Party. A positive value indicates rights transferred from another Party. Non-BPA rights cannot be transferred. Parties with Other Non-De Minimis Water Rights may receive a lease/transfer of annual allocation or Carryover to resolve Overproduction (see note numbers 4, 5, and 6 below). The sum of all transfers across all Parties will always be 0.

(3) Carryover only applies to BPA rights; non-BPA rights are not eligible for Carryover. The maximum Carryover balance is two times the BPA (= 2 x BPA). Balance as of October 1, 2023 is based on the final WY 2022 water rights accounting, unless adjustments have been made and documented since publishing the prior year accounting. One adjustment was made to the WY 2022 final Water Rights accounting – See note [C].

(4) The Judgment provides that in the first three years of operation, a Party can pump in excess of its Annual Allocation without incurring an immediate Overproduction penalty, so long as the total cumulative Overproduction in those three years does not exceed the cumulative

## 4.4 WY 2024 Pumping Assessments

### 4.4.1 Pumping Assessment Rate

The uniform pumping assessment is calculated based on the total of all Parties' Adjusted Pumping Calculations as follows:

$$\begin{aligned} & \text{Total Watermaster Assessment for WY (\$)} \\ & \div \text{Total Adjusted Pumping (af)} \\ \hline & = \text{Pumping Assessment Rate (\$/af)} \end{aligned}$$

The final Pumping Assessment of each Party is then computed as follows:

$$\begin{aligned} & \text{Adjusted Pumping Calculation (af)} \\ & \times \text{Pumping Assessment Rate (\$/af)} \\ \hline & = \text{Pumping Assessment (\$)} \end{aligned}$$

The final Pumping Assessment Rate for WY 2024, based on the approved WY 2024 Budget (see Section 2.6.3 of this Report) and the WY 2023 Adjusted Pumping Calculations is:

$$\begin{aligned} & \$458,000 \\ & \div 17,224.95 \text{ af} \\ \hline & = \$26.59/\text{af} \end{aligned}$$

### 4.4.2 Overproduction Penalty Assessments

The Judgment provides the Watermaster the authority to establish penalty assessments for Overproduction in accordance with the definitions described in Section 4.1. Pursuant to Section III.G.4 of the Judgment, the Watermaster annually establishes the Overproduction Penalty Assessment rate, which may not be less than \$500 per af of Overproduction. As part of the approval of the WY 2024 Budget, the Watermaster established the Overproduction Penalty Assessment rate at \$500 per af of Overproduction for any Party that does not remedy Overproduction in excess of the Maximum Overproduction Limit as of the completion of Water Rights Accounting for WY 2023.

As described in Section 4.3, and shown in Table 16, two Parties produced in excess of their cumulative Maximum Overproduction Limits during WY 2022. Both Parties remedied the excess Overproduction by leasing Carryover in WY 2023. Thus, no Overproduction Penalty Assessments will be issued in WY 2023.

## 5.0 BORREGO SPRINGS SUBBASIN HYDROGEOLOGIC CONDITIONS

### 5.1 Basin Setting

The Basin is defined as DWR Basin No. 7.024.01: the Borrego Springs Groundwater Subbasin (see location in Figure 1). The Basin has a surface area of approximately 98 square miles (62,776 acres). The western and southwestern boundaries of the Basin are defined by the contact of poorly to moderately consolidated sediments with the plutonic and metamorphic basement of Pinyon Ridge and the San Ysidro Mountains. The northern and eastern boundaries are defined by the mapped trace of the Coyote Creek fault that trends northwest-southeast. East of the Coyote Creek fault lies Coyote Mountain, the Borrego Badlands, and the Ocotillo-Clark Valley Groundwater Basin. The southeastern boundary of the Basin is defined by the location of San Felipe Creek, as mapped by the USGS National Hydrography Dataset, which also marks the northern boundary of the Ocotillo Wells Groundwater Subbasin (DWR Basin No. 7.024.02).

The Basin consists primarily of private land under County jurisdiction, which is surrounded on nearly all sides by land owned by the State of California – the ABDSP. Within the Basin, most of the land is undeveloped. The developed land uses include residential, agricultural, recreational (including golf courses), transportation infrastructure, and commercial uses. The sole municipal water district is the BWD, which provides water and sewer service to the developed portions of Borrego Valley within its service area. The sole mutual water company is the Borrego Air Ranch Mutual Water & Improvement Co., which provides water service to lots within its boundary.

Groundwater from the Basin is the sole source of water supply within the area. Groundwater is pumped for municipal supply; irrigation of agriculture, golf courses, and other recreational landscapes; and private domestic or commercial supply. Over a 65-year period prior to the development of the GMP, groundwater levels declined as much as 126 feet due to groundwater pumping in excesses of average annual recharge. An estimated 520,000 af of water was removed from storage over this period. These conditions prompted the DWR to designate the Basin as critically overdrafted and of high priority for groundwater management.

The hydrostratigraphy of the Basin has been divided into upper, middle, and lower aquifers. The differentiation between the three aquifers is based on a textural analysis of borehole lithologic logs and geophysical logs. The aquifer-system sediments consist of unconsolidated to poorly-consolidated, interbedded mixtures of gravel, sand, silt, and clay. As there are no regionally extensive aquitards (*i.e.*, a laterally continuous thick clay layers), the upper aquifer behaves in a predominantly unconfined manner, and the middle and lower aquifers exhibit leaky-confined or semi-confined characteristics based on limited aquifer testing. The lower aquifer is the most fine-grained unit, containing higher percentages of silt and clay. For the calculation of change in groundwater storage pursuant to CCR Article 7, Section 356.2, the three aquifers are considered to be a single unconfined aquifer.

A detailed description of the institutional setting, hydrogeology, and historical conditions within the Basin is included in Chapter 2 of the GMP (Dudek, 2020a).

### 5.2 Climate

Figure 3 shows the location of climate monitoring stations in and around the Basin that measure and record precipitation, temperature, and/or evapotranspiration (ET) data for the Plan Area. Each data type is described below.

### 5.2.1 Precipitation

Average annual precipitation is variable across the Basin, ranging from up to eight inches per year along the northwest edge of the valley to less than four inches per year to the southeast. Precipitation is greater outside the Basin in the mountains to the west, north, and northeast of the Borrego Valley. Precipitation patterns are influenced by two distinct hydrologic mechanisms. The first is the Pacific frontal systems that bring regional rain bands to Southern California, typically between October and April. The second is the isolated and scattered thunderstorms that occur when moisture from the Gulf of California travels from south to north across the Basin. This phenomenon, commonly referred to as the “monsoon season,” is strongest in the summer months, but is not a regular or consistent occurrence. Occasionally, the decaying remnants of former tropical storms or hurricanes can pass through the area and, in some years, will increase precipitation totals during the monsoon season. As a result of these disparate mechanisms, the precipitation record is highly variable both seasonally and annually. For example, one storm can drop half of the yearly rainfall in an otherwise dry season. To characterize the water year type in the Basin as “wet,” “normal,” or “dry,” the standard deviation from mean precipitation is used.

The weather station with the longest and most complete precipitation record is the Borrego Desert Park Station maintained by NOAA’s National Climactic Data Center<sup>67</sup> (see location on Figure 3). The station has complete water-year records from WY 1948 to present (75 years). The mean WY precipitation for this period is approximately 5.56 inches and the standard deviation from the mean is 3.44 inches. Years with precipitation within one standard deviation of the long-term average precipitation are defined as “normal” (e.g., between 2.12 to 9.00 inches); years with above “normal” precipitation are considered “wet;” and years with below “normal” precipitation are considered “dry.”

Figure 4 is plot of the WY annual precipitation totals, the long-term mean and standard deviation from the mean, and the cumulative departure from the mean (CDFM) precipitation for WYs 1948 to 2023. The CDFM plot is a useful way to characterize the occurrence and magnitude of wet and dry periods (relative to the mean): positive sloping segments (trending upward from left to right) indicate wet periods, and negative sloping segments (trending downward from left to right) indicate dry periods. Precipitation in WY 2023 was 8.55 inches, which is 2.99 inches more than the mean for the period of record. Based on the standard deviation from the mean, WY 2023 was a “normal” year. As shown on Figure 4, the region has been experiencing a nearly 30-year dry period since 1993, punctuated by a few wet years.

### 5.2.2 Temperature and Evapotranspiration

The climate of the Borrego Valley is arid with hot summers and cool winters. Based on the Borrego Desert Park Station, which has a nearly complete daily temperature record since 1968, the long-term mean annual daytime high temperature is 87.9°F, ranging from 61.1°F in January to 112.0°F in July. The mean annual nighttime low temperature is 58.9°F, ranging from 38.2°F in December to 82.5°F in July.

In WY 2023, the average daytime high temperature was 84.6°F and the average nighttime low was 58.6°F. The maximum average monthly daytime high temperature was 110.7°F in July 2023, and the minimum average monthly nighttime low temperature was 43.1°F in February 2023.

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<sup>67</sup> NOAA, 2022. Station: Borrego Desert Park, Network ID - [GHCND: USC00040983](https://www.ncdc.noaa.gov/cdstdatasets/ghcnd/stations/USC00040983).

## Water Year 2023 Annual Report for the Borrego Springs Subbasin

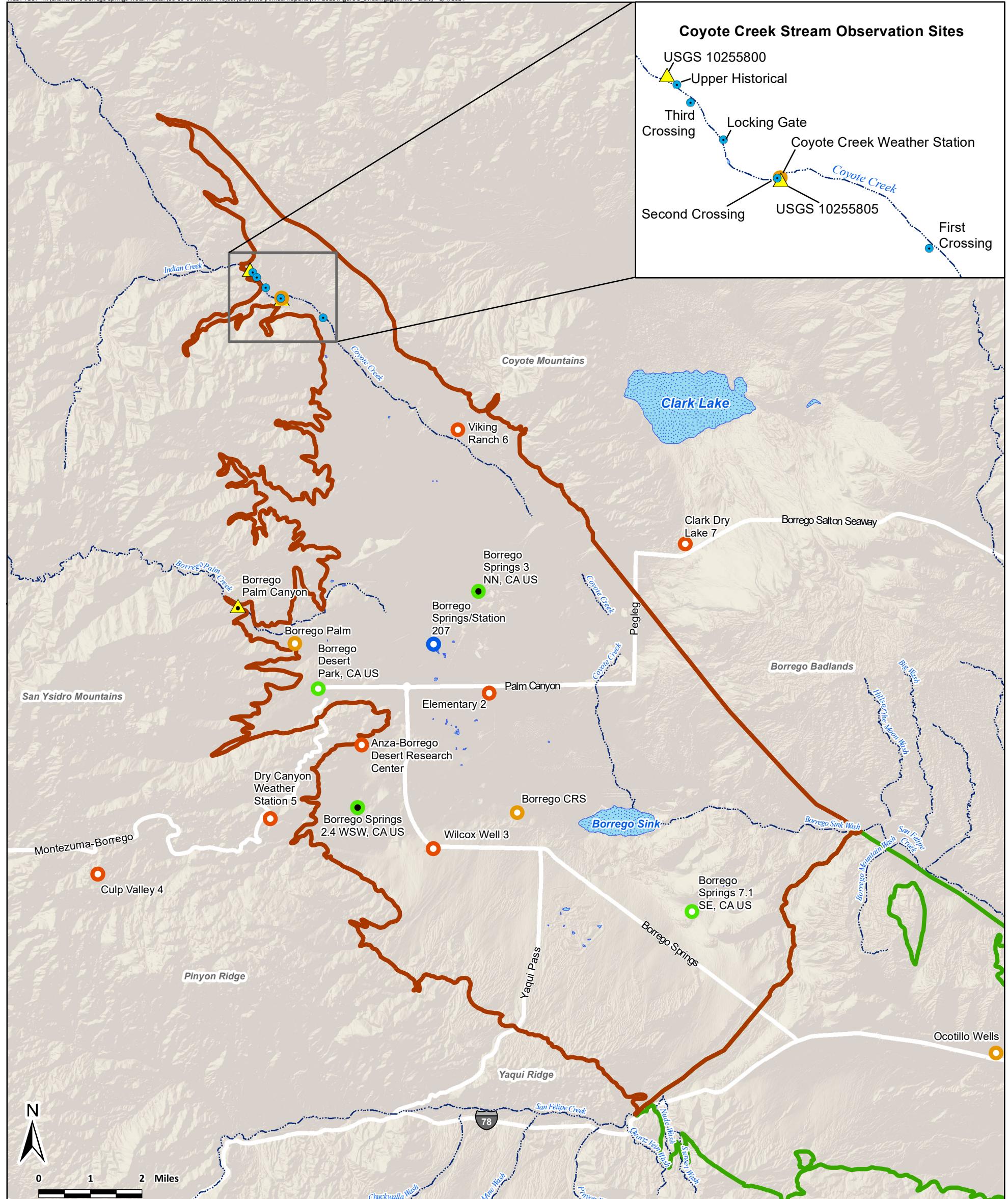
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According to the *State of California Reference Evapotranspiration Map* developed by California Irrigation Management Information System (CIMIS), the Basin is located within Evapotranspiration Zone 18, with an annual average reference evapotranspiration ( $ET_o$ ) of 71.6 inches or 5.97 feet, which is typical compared to other California desert environments<sup>68</sup> (DWR, 2012). The  $ET_o$  in the Basin is obtained from CIMIS Station 207 (see location on Figure 3). The  $ET_o$  values calculated from the CIMIS data reflect the amount of water that could be transpired by grass or alfalfa if supplied by irrigation. The  $ET_o$  values do not represent the actual transpiration from any specific crop or native vegetation. To calculate the ET rate for a specific crop or vegetation type, the  $ET_o$  is multiplied by a crop coefficient that adjusts the water consumption for that crop relative to the water consumption for alfalfa.

CIMIS Station 207 has nearly complete annual records of daily data since January 2009. The monthly and annual totals are shown in Table 17. The mean annual  $ET_o$  measured at CIMIS Station 207 between WY 2010 and WY 2023 was 68.03 inches per year (5.67 feet per year). In WY 2023, the total  $ET_o$  was 58.03 inches (4.84 feet) (CIMIS, 2023).

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<sup>68</sup> A study comparing ETo across different desert environments in California calculated the average annual ETo to range from approximately 5.46 ft/year to 7.28 ft/yr depending on the method used to calculate ET (Abd El-Wahed and Snyder, 2015. Available at: [https://www.researchgate.net/profile/Mohamed-Abd-El-wahed/publication/276150597\\_Calculating\\_Sunshine\\_Hours\\_and\\_Reference\\_Evapotranspiration\\_in\\_Arid\\_Regions\\_When\\_Solar\\_Radiation\\_Data\\_are\\_Limited/links/5a350e5e45851532e82f0ca1/Calculating-Sunshine-Hours-and-Reference-Evapotranspiration-in-Arid-Regions-When-Solar-Radiation-Data-are-Limited.pdf](https://www.researchgate.net/profile/Mohamed-Abd-El-wahed/publication/276150597_Calculating_Sunshine_Hours_and_Reference_Evapotranspiration_in_Arid_Regions_When_Solar_Radiation_Data_are_Limited/links/5a350e5e45851532e82f0ca1/Calculating-Sunshine-Hours-and-Reference-Evapotranspiration-in-Arid-Regions-When-Solar-Radiation-Data-are-Limited.pdf)).



#### Borrego Valley Groundwater Basin Subbasins

- Borrego Springs Groundwater Subbasin (7-024.01) (Orange box)
- Ocotillo Wells Groundwater Subbasin (7-024.02) (Green box)



#### Surface Water Features

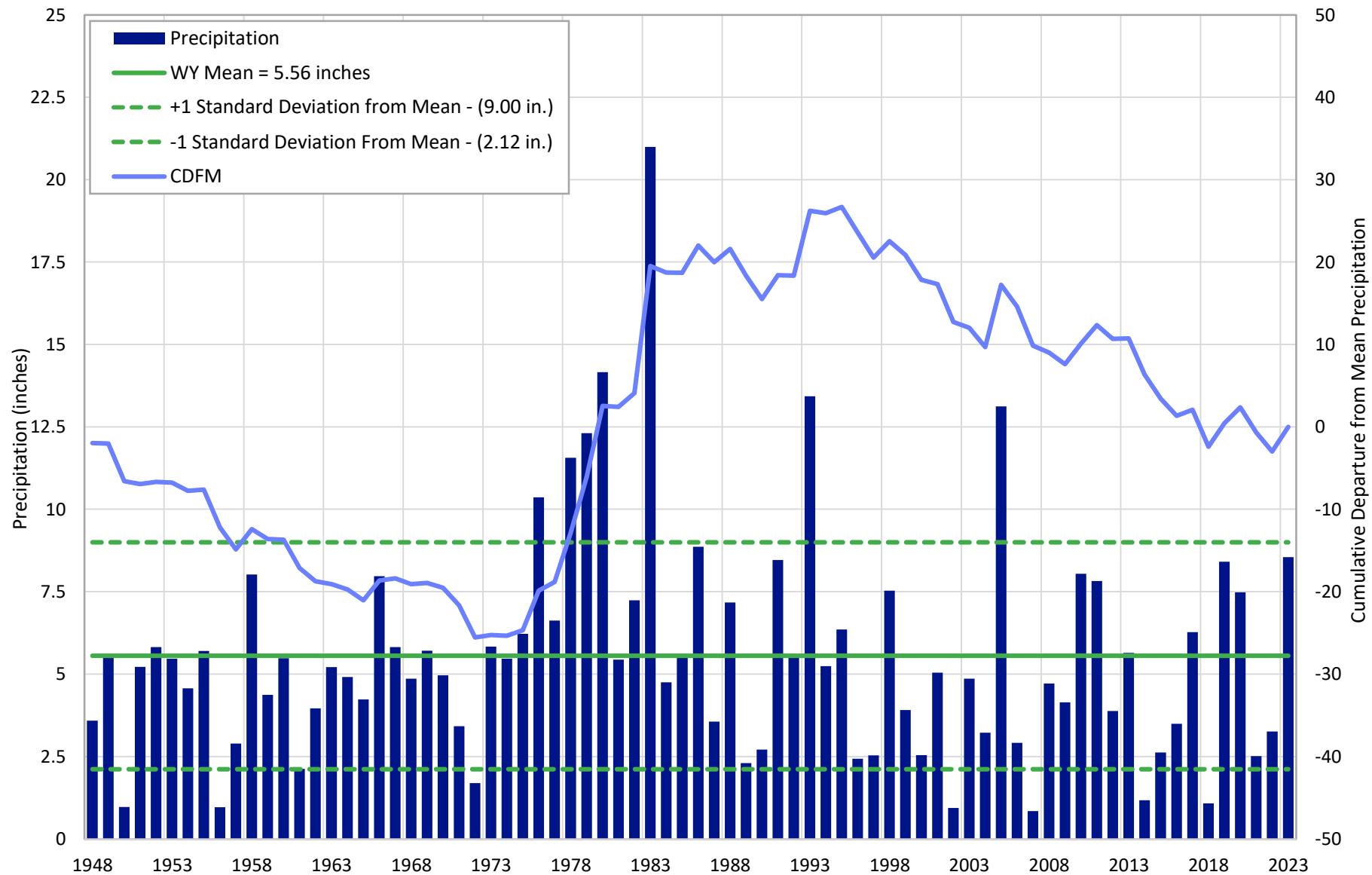
- Stream Channel (Dashed blue line)
- Dry Lake (Blue dotted area)

Figure 3

#### Atmospheric and Surface-Water Monitoring Stations

Borrego Springs Watermaster  
Borrego Springs Subbasin  
2023 Annual Report

**Figure 4. Time History of Annual Precipitation and Cumulative Departure From Mean  
Borrego Desert Park Station (GHCND:USC00040983)**



## 5.3 Surface Water

The Coyote Creek Watershed, which drains the Santa Rosa Mountains to the north of the Basin, provides most of the recharge to the Basin through infiltration of streamflow into the shallow alluvial sediments. Figure 3 shows the location of historical and current surface-water monitoring stations. There are two inactive USGS stream gages located along Coyote Creek at the northernmost boundary of the Basin. USGS Station Number 10255800 recorded daily discharge data from 1950–1983. During this period, mean annual stream discharge was about 1,831 afy (USGS, 2023a). USGS Station Number 10255805 recorded daily discharge data from 1983–1993. During this period, mean annual stream flow was about 1,774 afy (USGS, 2023b).

There is one drainage entering the Basin that is actively monitored with a USGS stream gage: Station Number 10255810, which is located in Borrego Palm Canyon downstream of the palm oasis (USGS, 2023c). This stream gage has a period of record dating back to 1950, with a data gap from 2004 through 2014. Daily data are available from 1950 to 2003 and sub-daily data (15 minute) from 2015 to 2023. Surface-water discharge at Station Number 10255810 is generally low over the period of record, with most of the discharge following precipitation events and thunderstorms, typically in the winter and spring months.

Figure 5a is a chart of the daily discharge measured at the Borrego Palm Canyon USGS stream gage for the period of record. The maximum daily mean discharge was 277 cubic feet per second (cfs), which occurred on August 16, 1979. In WY 2023, stream flow was present from early January 2023 through September 2023, with daily mean discharge ranging from 0.01 to 89.7 cfs on days when flow was recorded. The largest discharge event of 89.7 cfs occurred on August 20, 2023, when Hurricane Hilary brought torrential rainfalls to most of southern California. Figure 5b is a chart of the total annual stream discharge for the period of record. Annual stream discharge (for years with data) averaged 562.2 afy, ranging from 6.6 afy to 5,526.1 afy. The total annual stream discharge measured at the Borrego Palm Canyon station for WY 2023 was about 1,518 af (USGS, 2023c).

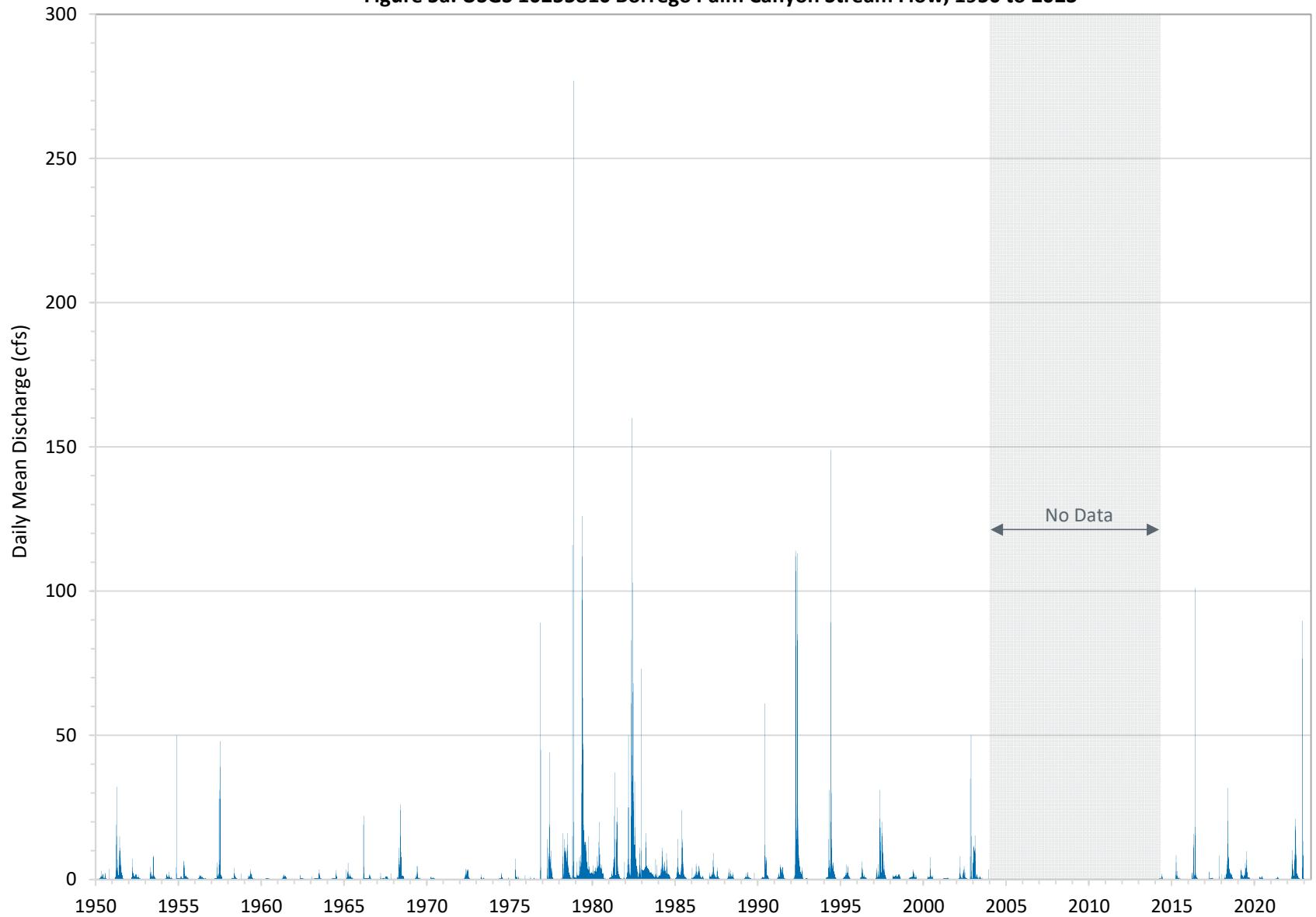
**Table 17. Monthly and Water Year Reference Evapotranspiration (ETo) Totals for CIMIS Station No. 207 – 2010-2023 (inches, except where noted)**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Water Year Total
<b>2010</b>	5.00	3.08	1.96	2.41	3.21	8.81	9.84	8.58	9.22	9.51	9.11	7.44	78.17
<b>2011</b>	4.36	2.88	1.98	2.68	3.35	5.55	7.12	8.77	8.23	7.98	8.47	6.43	67.8
<b>2012</b>	4.92	2.72	2.11	2.82	3.56	5.33	6.77	7.66	9.47	8.77	8.04	7.09	69.26
<b>2013</b>	5.04	3.20	2.23	2.54	3.57	5.75	7.56	8.64	9.02	8.01	7.57	6.46	69.59
<b>2014</b>	5.05	3.00	2.27	2.67	3.66	5.94	7.23	8.66	9.72	9.24	8.38	6.97	72.79
<b>2015</b>	4.70	3.14	1.58	2.17	3.54	5.83	7.23	7.95	8.52	8.76	8.74	6.55	68.71
<b>2016</b>	5.16	3.35	2.43	2.42	4.15	6.35	7.44	8.97	9.79	10.17	8.91	6.51	75.65
<b>2017</b>	5.17	3.37	1.99	2.33	3.28	6.27	8.18	9.14	10.20	9.70	9.43	6.99	76.05
<b>2018</b>	5.38	3.16	2.47	2.75	3.46	5.43	7.66	8.63	9.13	8.65	8.00	6.48	71.2
<b>2019</b>	4.20	2.96	1.65	2.00	2.38	4.68	6.56	6.82	7.61	8.19	7.67	6.10	60.82
<b>2020</b>	4.60	2.94	2.21	2.38	3.66	4.27	5.93	8.19	7.97	8.67	7.80	6.66	65.28
<b>2021</b>	4.81	2.96	2.04	2.29	3.19	4.86	6.59	7.90	8.03	7.97	7.43	6.31	64.38
<b>2022<sup>a</sup></b>	4.11	3.08	1.86	2.37	3.44	5.30	6.59	7.41	7.73	7.53	5.25	0.00	54.67
<b>2023</b>	2.85	2.65	1.72	2.22	2.80	4.39	6.70	7.78	7.44	7.82	6.90	4.76	58.03
<b>14-Year Average, inches</b>	4.67	3.04	2.04	2.43	3.38	5.63	7.24	8.22	8.72	8.64	7.98	6.05	68.03
<b>14-Year Average, feet</b>	0.39	0.25	0.17	0.20	0.28	0.47	0.60	0.69	0.73	0.72	0.66	0.50	5.67

Source: CIMIS 2023 – Station No. 207 (<https://cimis.water.ca.gov/>)

(a) Values reported for 2022 were downloaded from CIMIS daily data and compiled on 12/30/2022. CIMIS reports 0 in. ET for September 2022.

**Figure 5a. USGS 10255810 Borrego Palm Canyon Stream Flow, 1950 to 2023**



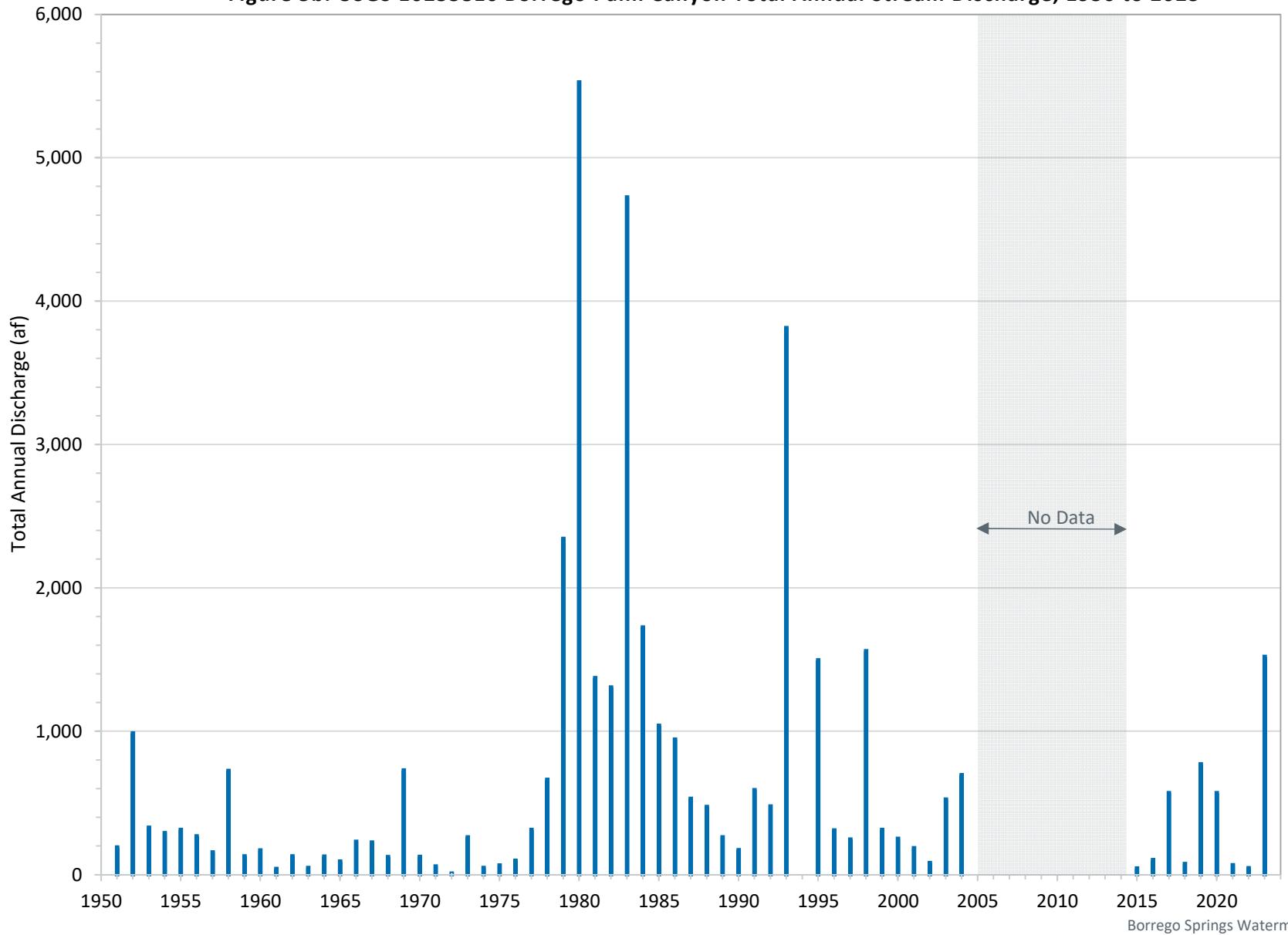
Borrego Springs Watermaster

Water Year 2023

Annual Report for the Borrego Springs Subbasin

Last Revised: 02-28-24

**Figure 5b. USGS 10255810 Borrego Palm Canyon Total Annual Stream Discharge, 1950 to 2023**



Borrego Springs Watermaster

Water Year 2023

Annual Report for the Borrego Springs Subbasin

Last Revised: 02-28-24

## 5.4 Water Use

### 5.4.1 Groundwater Pumping

Groundwater is pumped from the Basin for use by the following sectors:

- **Agriculture.** Agricultural pumping serves a variety of crop types including citrus, palms, date palms, and nurseries. The majority of groundwater pumped from the Basin is used for crop irrigation.
- **Recreational.** Recreational pumping is used to irrigate of golf courses, including: De Anza Country Club, Rams Hill Country Club, Road Runner Golf and Country Club, and The Springs at Borrego RV Resort and Golf Course.
- **Municipal.** Municipal pumping is performed by the BWD and served to its customers for drinking water (potable) and other non-potable uses.
- **Other Non-De Minimis.** Other non-De Minimis users are those BPA Parties that do not fall into the Agriculture, Recreational, or Municipal categories.
- **De Minimis.** Private groundwater pumpers who extract less than two (2) afy for use on their real property overlying the Basin are considered De Minimis pumpers under the Judgment. Well users are generally considered to be De Minimis unless their properties contain irrigated areas more than about 0.5 acres, which could result in use of more than two afy of water. During the development of the GMP, it was estimated there were 53 De Minimis pumpers in the Basin.

Figure 6 is a time-series chart of historical groundwater pumping in the Basin from 1945 through 2023. The chart is divided into two parts to facilitate the comparison of groundwater pumping to the Rampdown:

1. Groundwater pumping that occurred prior to GMP implementation (1945-2019)
2. Groundwater pumping that occurred during GMP implementation (2020-2023)

The subsections below describe: (i) the methods that have been used to estimate groundwater pumping; (ii) total groundwater pumping for WY 2023 by sector; and (iii) a comparison of annual groundwater pumping during GMP implementation (2020-2023) to the Rampdown schedule in the Judgment.

#### 5.4.1.1 Methods for Estimating Groundwater Pumping

The following methods have been used to estimate groundwater pumping in the Basin:

1. **Model-estimated.** The BVHM simulated historical groundwater pumping as a component of the water budget for the period of 1945-2016. Most of the historical pumping was un-metered agricultural pumping. The BVHM estimated historical un-metered pumping through the application of the FMP. Other metered pumping was assigned in the BVHM as through the MNW2 package. These historical pumping estimates are currently being updated for the Redetermination of the Sustainable Yield (as discussed in Section 3.4).

2. **Water Duty Method.** To support the development of the GMP and updates to the Stipulated Judgment filings, un-metered pumping was estimated using a water duty method for the period of 2015 to 2020.<sup>69</sup> The water duty method estimated un-metered pumping based on crop-specific water-use factors defined in the GMP (Dudek, 2020a) and the most current information on the irrigated area and crop type of each Pumper based on an aerial imagery analysis.
3. **Meter Data.** Prior to WY 2021, meter data was available at a small number of wells. Since WY 2021, most of the pumping by BPA Parties has been metered and reported to the Watermaster on a monthly basis (refer to Section 3.1.1).<sup>70</sup>.
4. **De Minimis Pumping.** There are an estimated 53 active De Minimis pumpers within the Basin—each assumed to pump 0.5 afy (Dudek, 2020b). Therefore, De Minimis pumping in the Basin is estimated to be approximately 26.5 afy.

In Figure 6, the pumping totals shown are comprised of the following methods:

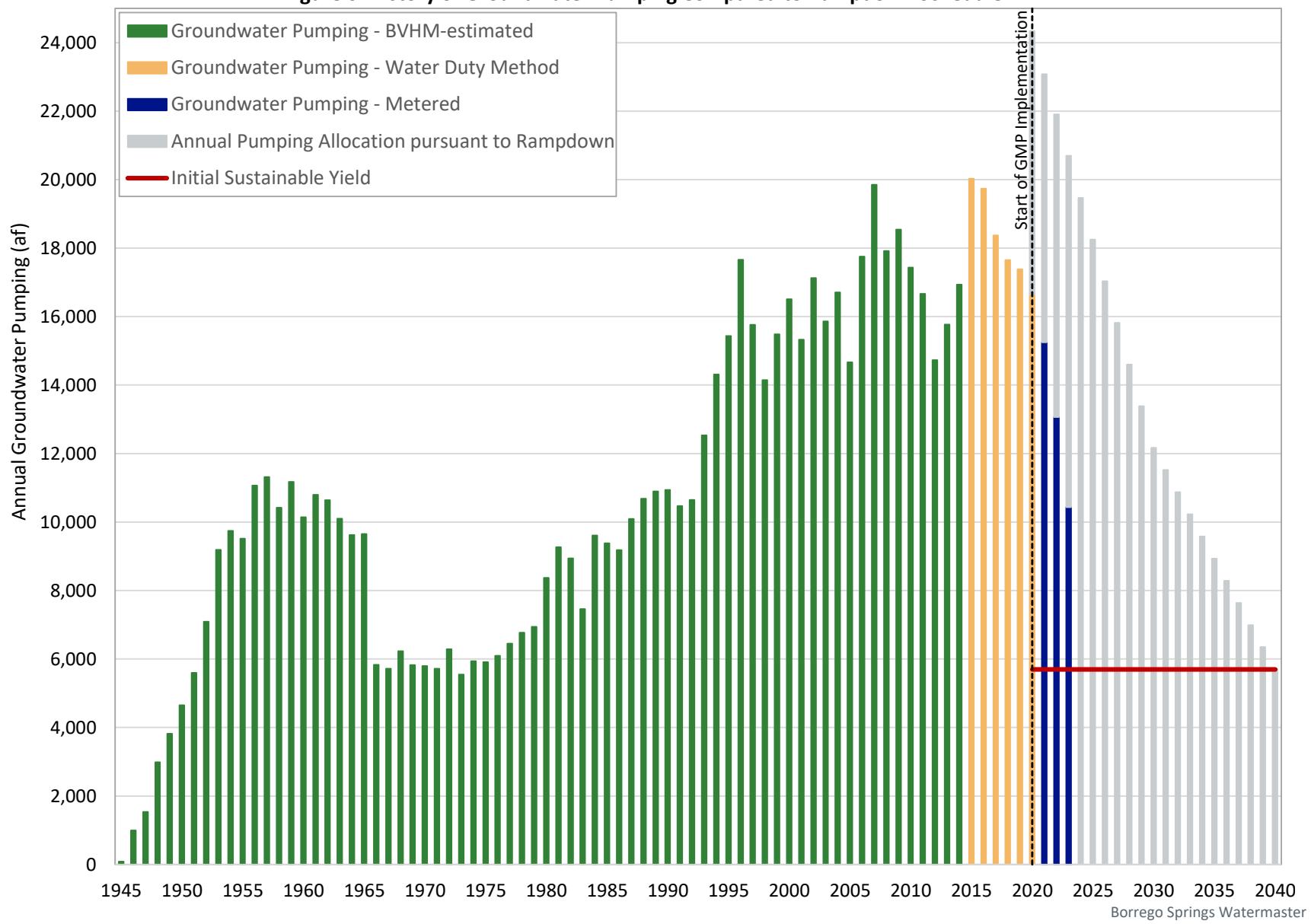
- WY 1945 to 2014: Model-estimated data, which are symbolized as dark green bars.
- WY 2015 to 2020: Water duty estimates (majority), plus limited meter data, plus De Minimis estimates. The total annual estimates are symbolized as orange bars.
- WY 2021 to 2023: Meter data (majority), plus water duty estimates, plus De Minimis estimates. The total annual estimates are symbolized as dark blue bars.

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<sup>69</sup> In select cases, pumping records were available and provided by non-De Minimis users to support the estimate of groundwater pumping during GMP development.

<sup>70</sup> The Judgment was entered on April 8, 2021. The non-Settling Parties were not required to meter wells until after entry of the Judgment, thus most did not have a full year of metered data for WY 2021. Where metered data were not available for a Party, the water duty methodology used in the GMP was applied to estimate pumping (refer to Table 16 to see the meter status of each Party as of 2023). By WY 2022, and in WY 2023, the majority of Parties were metered and had a full year of metered data.

**Figure 6. History of Groundwater Pumping Compared to Rampdown Schedule**



#### **5.4.1.2 Groundwater Pumping in WY 2023**

Total pumping in WY 2023 was about 10,430 af.<sup>71</sup> The following figures and tables characterize the pumping that occurred in WY 2023:

- Figure 7 shows the location of each pumping well in the Basin for WY 2023. Each well is symbolized by sector and magnitude of pumping in WY 2023.
- Figure 8 is a time-series chart of annual groundwater pumping, by sector, for WY 2015 through 2023.
- Table 18 summarizes annual groundwater pumping in the Basin, by sector, for WY 2015 through 2023.

The following observations are made through inspection of these data graphics:

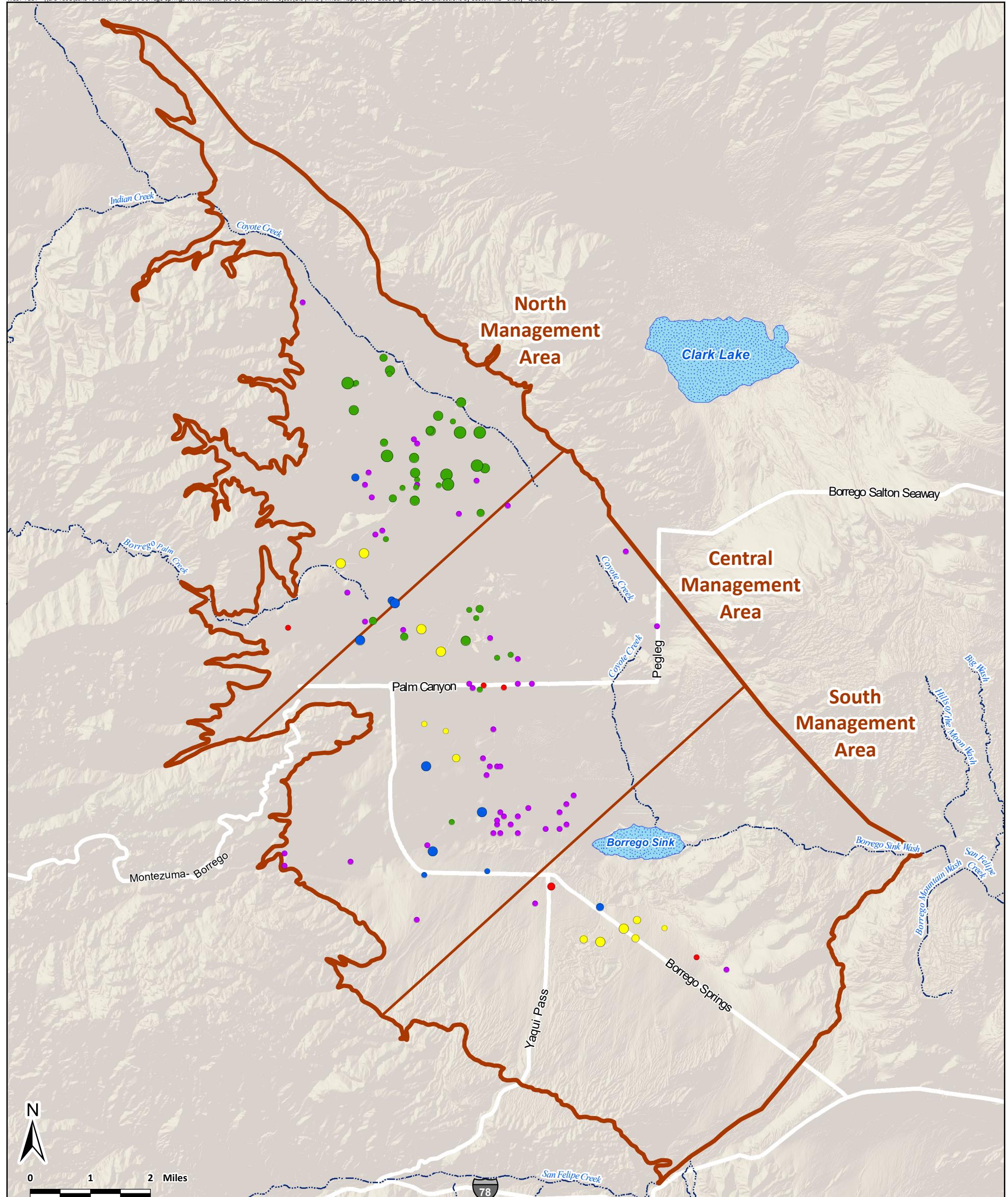
- Total annual groundwater pumping has been decreasing.
  - From WY 2015 to WY 2023, since the passage of SGMA, pumping declined from about 20,028 af in WY 2015 to about 10,430 af in WY 2023 (a decrease of 9,598 af, or approximately 48 percent).
  - Groundwater pumping decreased by 37 percent since the start of the GMP implementation (WY 2020) and by 20 percent relative to WY 2022.
  - It should be noted that pumping estimates for WY 2021 through 2023 are based primarily on metered data and are not directly comparable to the WY pumping estimates from WY 2015 to WY 2020 that were primarily estimated by the water duty method. That said, the improvement in monitoring is not driving the significant decrease in pumping. The decrease in pumping can be attributed to changes associated with taking farmland out of production, improvements in irrigation efficiency, and potentially wet year conditions, in the case of WY 2023. The relative contribution of each of these drivers has not been quantified or assessed.
- The agriculture sector continued to pump most of the groundwater from the Basin in WY 2023. The majority of the reduction in pumping from WY 2015 to WY 2023 was from the agriculture sector (about 7,904 af), which is reflective of the above noted changes (taking farmland out of production and improvements in irrigation efficiency).

#### **5.4.1.3 Comparison of Groundwater Pumping to the Rampdown**

Figure 6, in addition to presenting historical groundwater pumping, compares the pumping that occurred to the Annual Allocation pursuant to the Rampdown. Annual pumping has been less than the Annual Allocation for each year since the start of GMP implementation. In WY 2023, total pumping of 10,430 af was approximately 50% less than the Annual Allocation of 20,694 af. As discussed in Section 4, a portion of the unpumped water is eligible to be purchased as Carryover for pumping in future years.

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<sup>71</sup> The WY 2023 pumping amount shown in Table 18 is slightly larger than reported in Section 4.3 (by 26.5 af) because the Water Rights Accounting does not consider De Minimis pumping.



#### Groundwater Extractions in 2023 by Sector (af)

Extraction Amount Represented by Symbol Size and Sector Represented by Symbol Color

0 - 25	Agriculture
25 - 100	Recreation
100 - 500	Municipal
500 - 1000	Other Non-Deminimis
>1000	De Minimis

#### Other Features

Borrego Springs Subbasin with Management Area Divisions

#### Surface Water Features

Stream Channel

Dry Lake



Figure 7

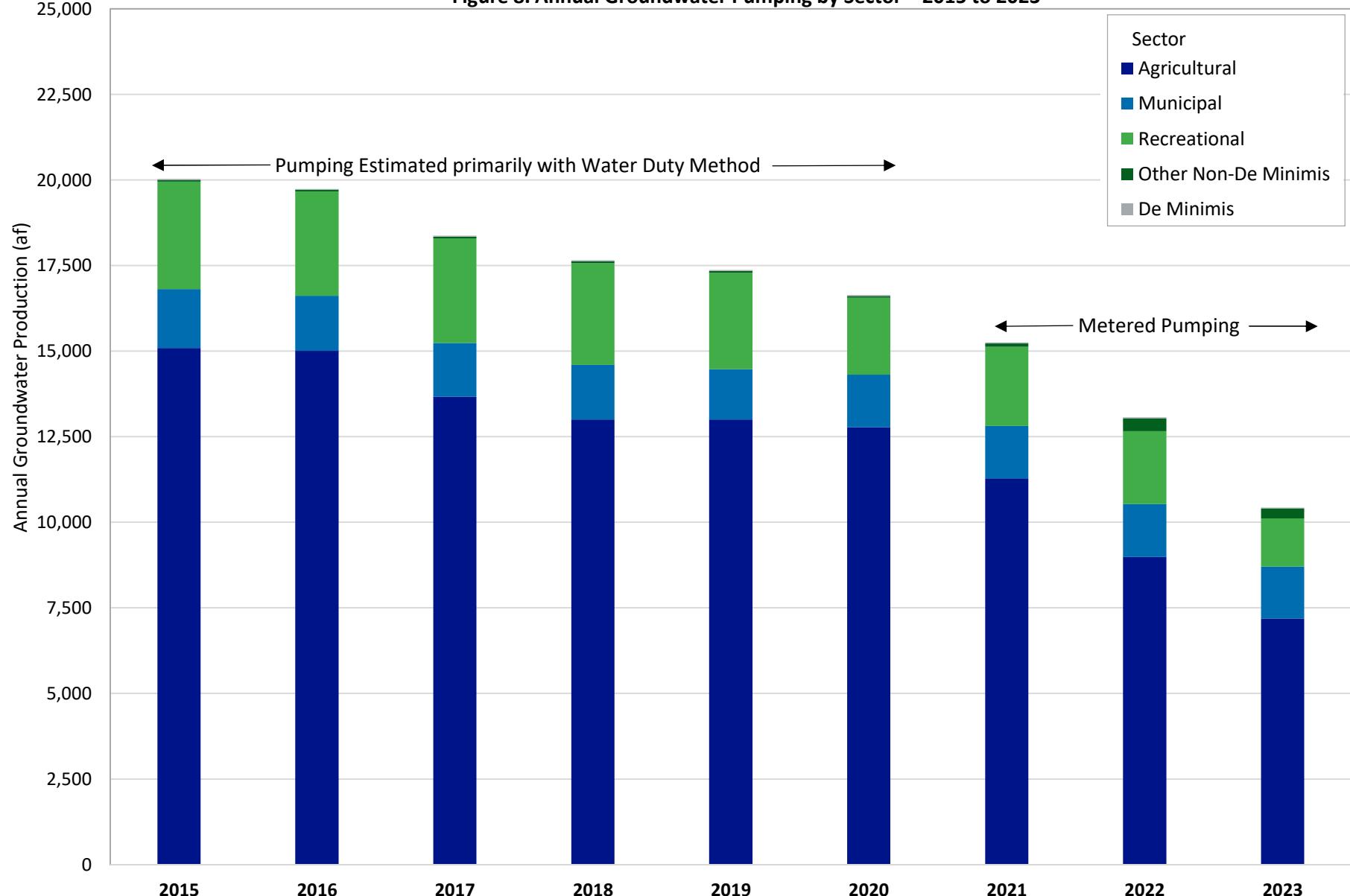
#### Groundwater Extractions by Sector (2023)

Borrego Springs Watermaster  
Borrego Springs Subbasin  
2023 Annual Report

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Figure 8. Annual Groundwater Pumping by Sector – 2015 to 2023



**Table 18. Groundwater Pumping by Sector - 2015 to 2023**

Groundwater User Type	Annual Groundwater Extraction, acre-feet								
	2015 <sup>(a)</sup>	2016 <sup>(a)</sup>	2017 <sup>(a)</sup>	2018 <sup>(a)</sup>	2019 <sup>(b)</sup>	2020 <sup>(c)</sup>	2021 <sup>(d)</sup>	2022 <sup>(d)</sup>	2023 <sup>(d),(e)</sup>
Agricultural	15,093.73	15,007.35	13,668.09	13,006.45	13,025.81	12,771.21	11,282.89	8,986.39	7,189.78
Recreational	3,137.39	3,045.22	3,058.91	2,973.94	2,807.67	2,245.84	2,317.84	2,131.40	1,408.81
Municipal	1,719.91	1,610.42	1,568.04	1,593.74	1,466.48	1,541.42	1,528.84	1,545.46	1,516.10
Other Non-De Minimis	50.40	49.72	47.93	52.51	52.51	52.51	91.89	374.42	288.69
De Minimis	26.50	26.50	26.50	26.50	26.50	26.50	26.50	26.50	26.50
<b>Total Pumping</b>	<b>20,027.93</b>	<b>19,739.21</b>	<b>18,369.47</b>	<b>17,653.14</b>	<b>17,378.97</b>	<b>16,637.48</b>	<b>15,247.96</b>	<b>13,064.17</b>	<b>10,429.88</b>

(a) Source for 2015-2018 estimates: Dudek, 2020b:

- 2015 pumping extrapolated from preceding year aerial imagery for all sites without metered pumping records.
- Water credit sites assumed to have ceased irrigation either on date of issuance of water credits or based on review of mid-2014 aerial imagery.
- A water use factor of 0.5 acre-feet per dwelling unit utilized to calculate De Minimis groundwater use.

(b) 2019 pumping updated from the WY 2019 Annual Report (Dudek, 2020b) to be consistent with recent updates made Dudek to support the Court proceedings on the proposed Stipulated Judgment. The 2019 pumping was extrapolated by Dudek from comparisons of 2018 and 2020 aerial imagery for all sites without metered pumping records.

(c) 2020 Sources and Methods:

- Agricultural pumping estimated based on method used for 2015-2018 (Dudek 2020a, 2020b) and using reported changes in 2020 aerial imagery that were assessed by Dudek to update the 2019 pumping estimates described for 2019 in note (b) above.
- Municipal: Based on BWD monthly reports to the Board.
- Golf Course: Based on meter reads for Borrego Springs Resort, Circle Club, and Rams Hill. Other pumping by golf courses (De Anza, Road Runner, The Springs) based on estimation method used for 2015-2018 (Dudek 2020a, 2020b).
- Other non-De Minimis and De Minimis pumping estimated based on method used for 2015-2018 (Dudek 2020a, 2020b).

(d) 2021, 2022, and 2023 Sources and Methods:

- Pumping metered or estimated for all BPA parties. Table 11 in Section 4 of this Annual Report indicates whether pumping was metered or estimated, by Party for WY 2023.
- De minimis pumping estimated based on GMP method used for 2015-2018 (Dudek 2020a, 2020b).

(e) The total WY 2023 pumping amount shown in Table 13 is slightly larger than reported in Section 4.3 (by 26.5 af) because the Water Rights Accounting does not consider De Minimis pumping.

### 5.4.2 Surface Water Use

Currently, there is no surface water supply that is directly used or indirectly used for artificial or in-lieu recharge in the Basin.

### 5.4.3 Total Water Use

Because there is no surface water used in the Basin, total water use in WY 2023 was equivalent to the sum of all groundwater pumping shown in Table 18: 10,430 af.<sup>72</sup>

## 5.5 Groundwater Conditions

This section describes groundwater conditions for the three applicable Sustainability Indicators<sup>73</sup> identified in the GMP (and described in Section 1.3.2.1):

- Chronic Lowering of Groundwater Levels
- Reduction of Groundwater Storage
- Degradation of Groundwater Quality

For each Sustainability Indicator, this section describes historical trends and current conditions, and compares these groundwater conditions to the Minimum Thresholds. The Minimum Thresholds are quantitative values that represent the groundwater conditions at a Representative Monitoring Well that, when exceeded individually or in combination with Minimum Thresholds at other monitoring sites, may cause an Undesirable Result(s) in the Basin.

### 5.5.1 Groundwater Elevations

This section describes the historical trends and current conditions for groundwater elevations in the Basin through WY 2023, and then compares the trends and current conditions to the Sustainable Management Criteria in the GMP to evaluate progress towards achieving sustainability.

#### 5.5.1.1 Historical Trends and Current Conditions

Prior to development of the Basin, groundwater flow was predominantly from the northwest to the southeast and groundwater elevations ranged from 600 feet above mean sea level (ft-amsl) in the northwestern part of the Basin to 460 ft-amsl in the southeast, near the Borrego Sink (Dudek, 2020a). Since the early 1950s, groundwater pumping in the Basin has exceeded recharge causing long-term declines in groundwater levels and changes to the direction of groundwater flow in the Basin.

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<sup>72</sup> The WY 2023 pumping amount shown in Table 18 is slightly larger than reported in Section 4.3 (by 26.5 af) because the Water Rights Accounting does not consider De Minimis pumping.

<sup>73</sup> “Sustainability Indicator” refers to any of the effects caused by groundwater conditions occurring throughout the Basin that, when significant and unreasonable, cause undesirable results (California Water Code Section 10721(x)).

## Water Year 2023 Annual Report for the Borrego Springs Subbasin

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Figure 9 is a time-series chart that shows long-term trends in groundwater levels at selected wells in the North, Central, and South Management Areas of the Basin. Appendix F contains time-series charts of groundwater-level data for each well in the groundwater-level monitoring network from 1950 through 2023. Inspection of the groundwater levels shown on Figures 9 and Appendix F illustrate that:

- The long-term decline in groundwater levels within the Basin was most pronounced in the North Management Area and generally decreased in magnitude towards the South Management Area (Figure 9).
- From 1950 through 2023, groundwater levels have:
  - Decreased at most wells with measured groundwater-level data. A maximum decline of approximately 101 ft occurred at the ID4-3 well (see Figure F-8) in the North Management Area.<sup>74</sup>
  - Increased or remained relatively stable at some wells located in southern portion of the Basin (see Figures F-34, F-39, F-51, F-52, F-54, and F-56).

Figures 10 and 11 are maps that depict WY 2023 conditions for groundwater elevations during spring 2023 and fall 2023, respectively. These maps display “true static” groundwater elevations (*i.e.*, groundwater elevations that are not influenced by pumping) at selected wells across the Basin and contours of equal groundwater elevation based on the elevations.<sup>75</sup> The maps were prepared pursuant to a Watermaster-approved methodology to estimate annual changes in groundwater storage (see Section 5.5.2).<sup>76</sup> The main observations from Figures 10 and 11 are:

- Groundwater elevations were highest in the North Management Area and South Management Area and lowest near the major pumping centers in the Central Management Areas.
- The direction of groundwater flow was away from recharge areas along the Basin boundaries (mountain front watersheds and San Felipe Creek) towards the areas of major pumping in the Central Management Area.
- Seasonal variations in groundwater elevations were minor and did not change the regional directions of groundwater flow.

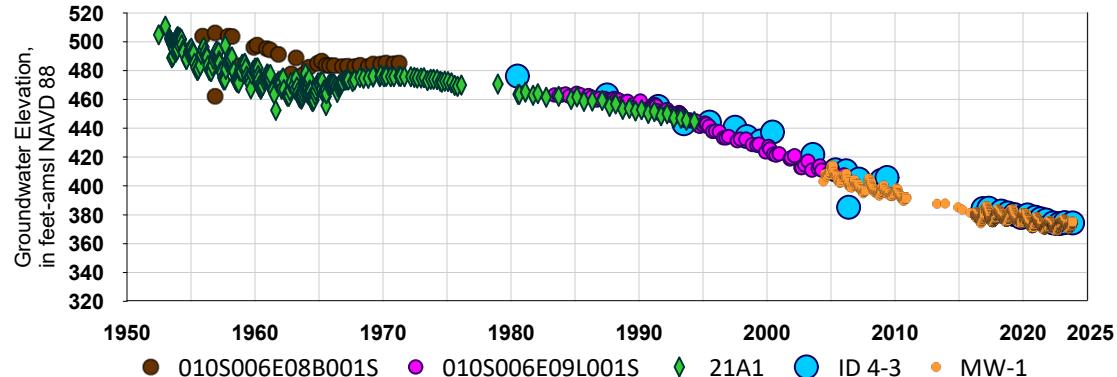
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<sup>74</sup> Groundwater elevation data for well ID4-3 is only available from 1980 through 2023.

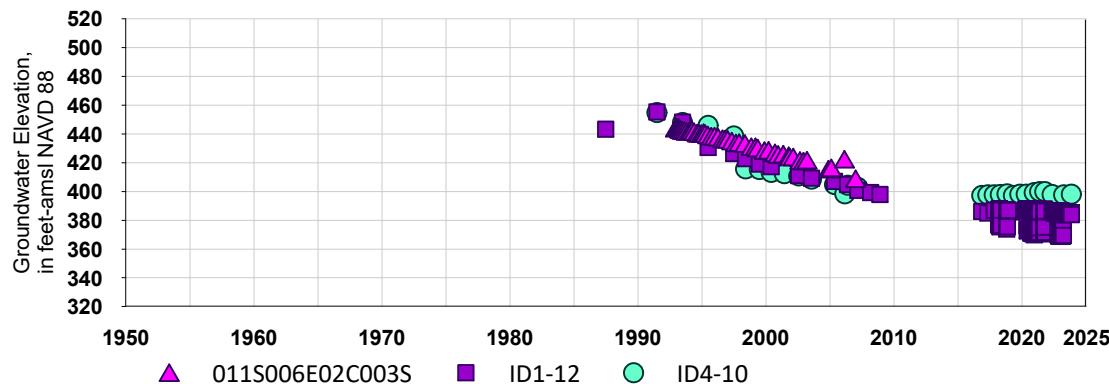
<sup>75</sup> The groundwater-elevation contours shown on Figures 10 and 11 were prepared for the specific purpose of estimating groundwater storage change for the Annual Report and should not be used for other purposes.

<sup>76</sup> West Yost. 2022. [Methods to Estimate Annual Storage Change in the Borrego Springs Subbasin](#). Prepared for the Borrego Springs Watermaster. February 11, 2022.

## North Management Area



## Central Management Area



## South Management Area

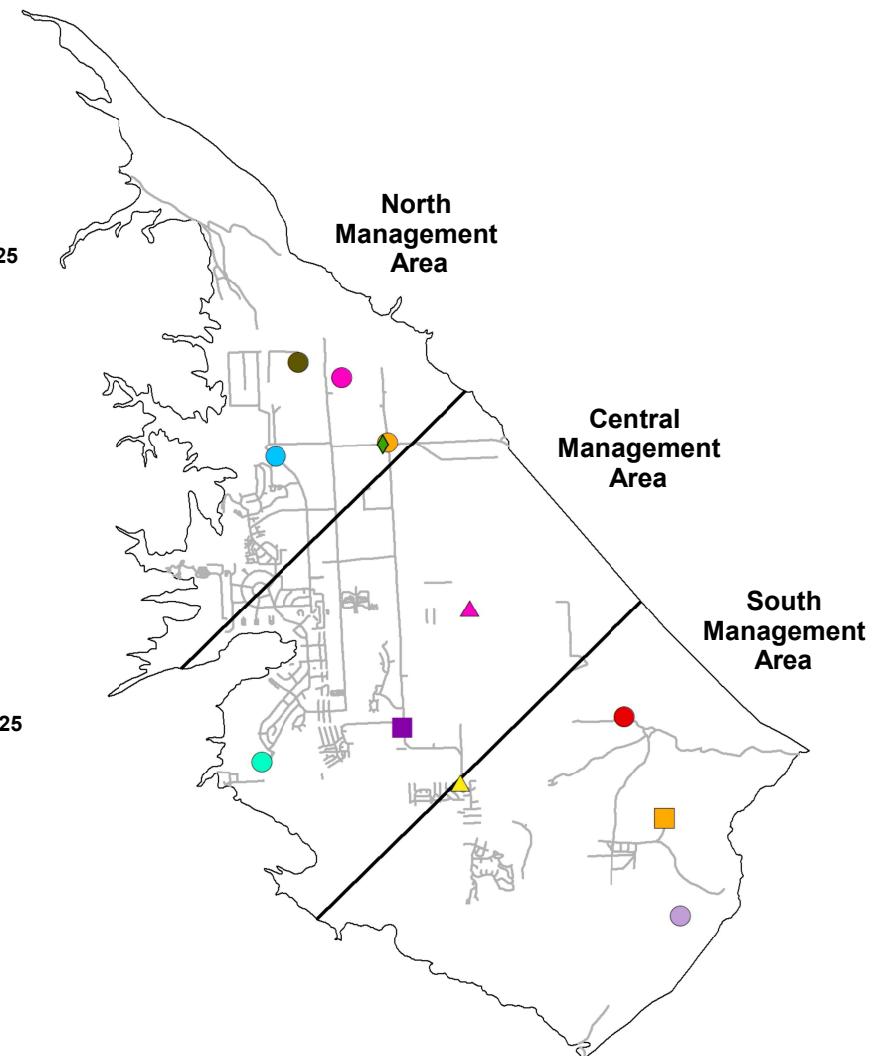
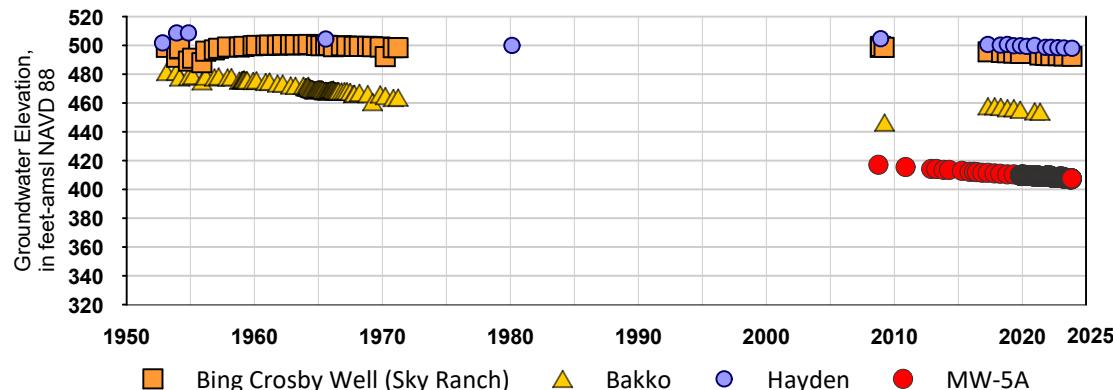
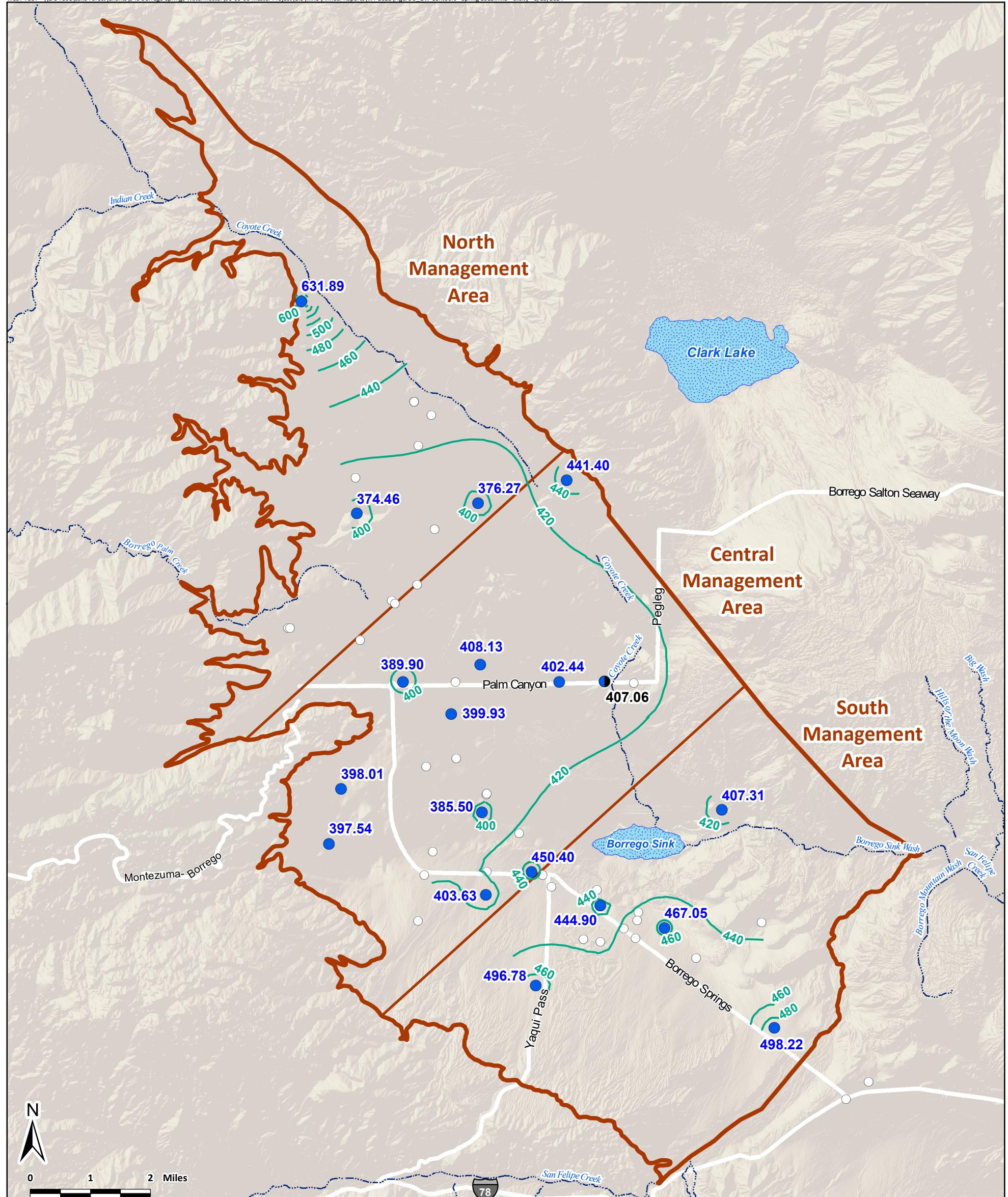


Figure 9

Groundwater Levels in Selected Wells within the Borrego Groundwater Subbasin


**Groundwater Monitoring Wells Used to Develop Groundwater Elevation Contours for Spring 2023**

- True static groundwater elevation (ft-amsl)
- Estimated static groundwater elevation (ft-amsl)
- 400 — Groundwater Elevation Contours Spring 2023 (ft-amsl)

**Other Features**

- Borrego Springs Subbasin with Management Area Divisions
- Other Groundwater Monitoring Wells
- Stream Channel
- Dry Lake



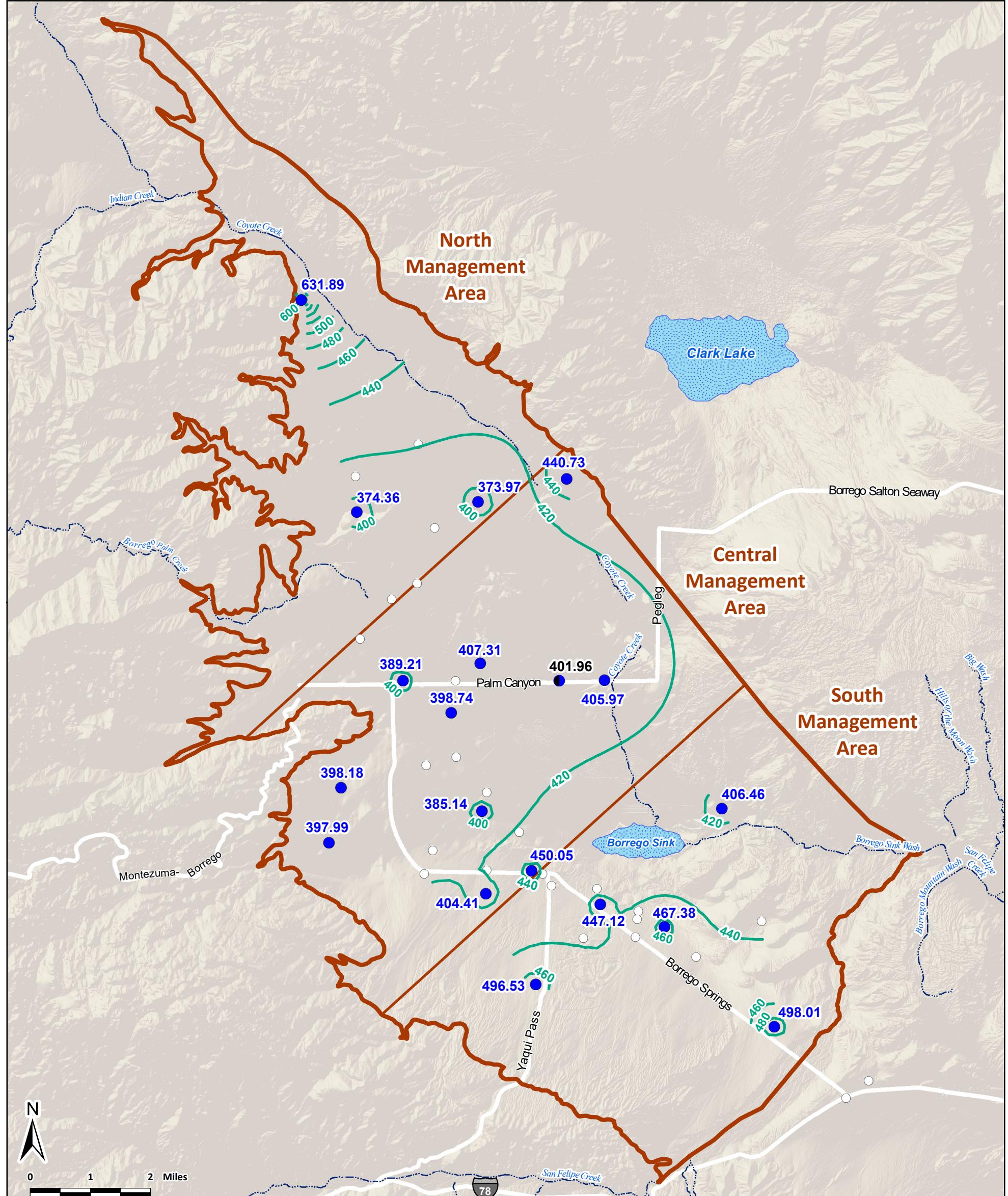
The groundwater-elevation contours shown on this map were prepared for the specific purpose of estimating groundwater storage change for the Annual Report, and should not be used for other purposes.

Figure 10

Spring 2023  
Groundwater Elevation  
Borrego Springs Watermaster  
Borrego Springs Subbasin  
2023 Annual Report

Prepared by:





## Groundwater Monitoring Wells Used to Develop Groundwater Elevation Contours for Fall 2022

350 ● True static groundwater elevation (ft-amsl)

350 Estimated static groundwater elevation (ft-amsl)

—400— **Groundwater Elevation Contours**  
*Fall 2023 (ft-amsl)*

## Other Features

 Borrego Springs Subbasin with Management Area Divisions

### ○ Other Groundwater Monitoring Wells

## Surface Water Features

— Stream Channel

Dry Lake



Figure 11

Fall 2023

## Groundwater Elevation

## Borrego Springs Watermaster Borrego Springs Subbasin

### 5.5.1.2 Comparison to Sustainable Management Criteria

The GMP identifies two groundwater level conditions that will occur when the Sustainability Goal is met in the Basin: 1) groundwater levels are at sufficient elevations to not cause undesirable results and 2) the trends in groundwater levels are stable or increasing. The GMP quantified these goals by establishing Minimum Thresholds for static groundwater elevations at 16 Representative Monitoring Wells across the Basin.<sup>77</sup> The Minimum Thresholds were based on an analysis of i) the top of well screens, ii) on model projections of groundwater level changes that are expected to occur by 2040, and iii) the variability of climate and groundwater recharge. The Minimum Thresholds are intended to be compared to static (non-pumping) groundwater elevations conditions.

The following figures and tables were prepared to assess the groundwater level trends since the beginning of GMP implementation, where the “baseline” condition is the start of WY 2020 (e.g. October [fall] 2019), which is year “0” of the pumping Rampdown:

- Figures 12a through 12p are time-series charts that show historical groundwater elevations<sup>78</sup> prior to the start of GMP implementation, groundwater elevations since the start of GMP implementation (e.g. fall 2019), and the Minimum Threshold for each of the 16 Representative Monitoring Wells. The locations of the Representative Monitoring Wells are identified on Figure 2.
- Table 19 compares fall 2023 groundwater elevations to the Minimum Thresholds for the 16 Representative Monitoring Wells.
- Table 20 compares the trends in groundwater-elevations at the 16 Representative Monitoring Wells for the period of GMP implementation to the period prior to GMP implementation.

Inspection of the groundwater-elevation data shown on these figures and tables illustrates that:

- There have been no exceedances of Minimum Thresholds at any Representative Monitoring Well.<sup>79</sup>
- Generally, groundwater levels continue to decline across the Basin. However, the rate of decline since GMP implementation is less than the historical rate of decline at all but three wells.

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<sup>77</sup> Minimum Thresholds for the chronic lowering of groundwater levels for each Representative Monitoring Well are defined in Tables 3-4 and 3-5 in the GMP.

<sup>78</sup> Figures 12a through 12p show both i) static groundwater elevations and ii) groundwater elevations influenced by groundwater pumping. Static groundwater elevations are groundwater levels in an aquifer under non-pumping conditions. Pumping groundwater elevations, observed in the high-frequency transducer data, are groundwater elevations during groundwater pumping at the well, or a nearby well. Pumping groundwater elevations show fluctuations in groundwater levels due to pumping, including drawdown (groundwater level declines due to water being removed from the aquifer) and recovery (groundwater level increases once pumping ends). Only static elevations are used to perform analysis of regional groundwater elevations.

<sup>79</sup> Figures 12d, 12f, and 12n show that the lowest groundwater elevations are periodically below the Minimum Thresholds for the RH-1, ID1-16, and MW-3 wells, respectively. The groundwater elevations below the Minimum Threshold occur during well operation (i.e. pumping) of the RH-1 and ID1-16 wells. For MW-3, the lowest groundwater elevations occur when a nearby pumping well (ID1-8) is in operation. The groundwater elevations that occur while the wells are pumping or influenced by pumping are not representative of static groundwater conditions and, therefore, are not considered to be below the Minimum Threshold.

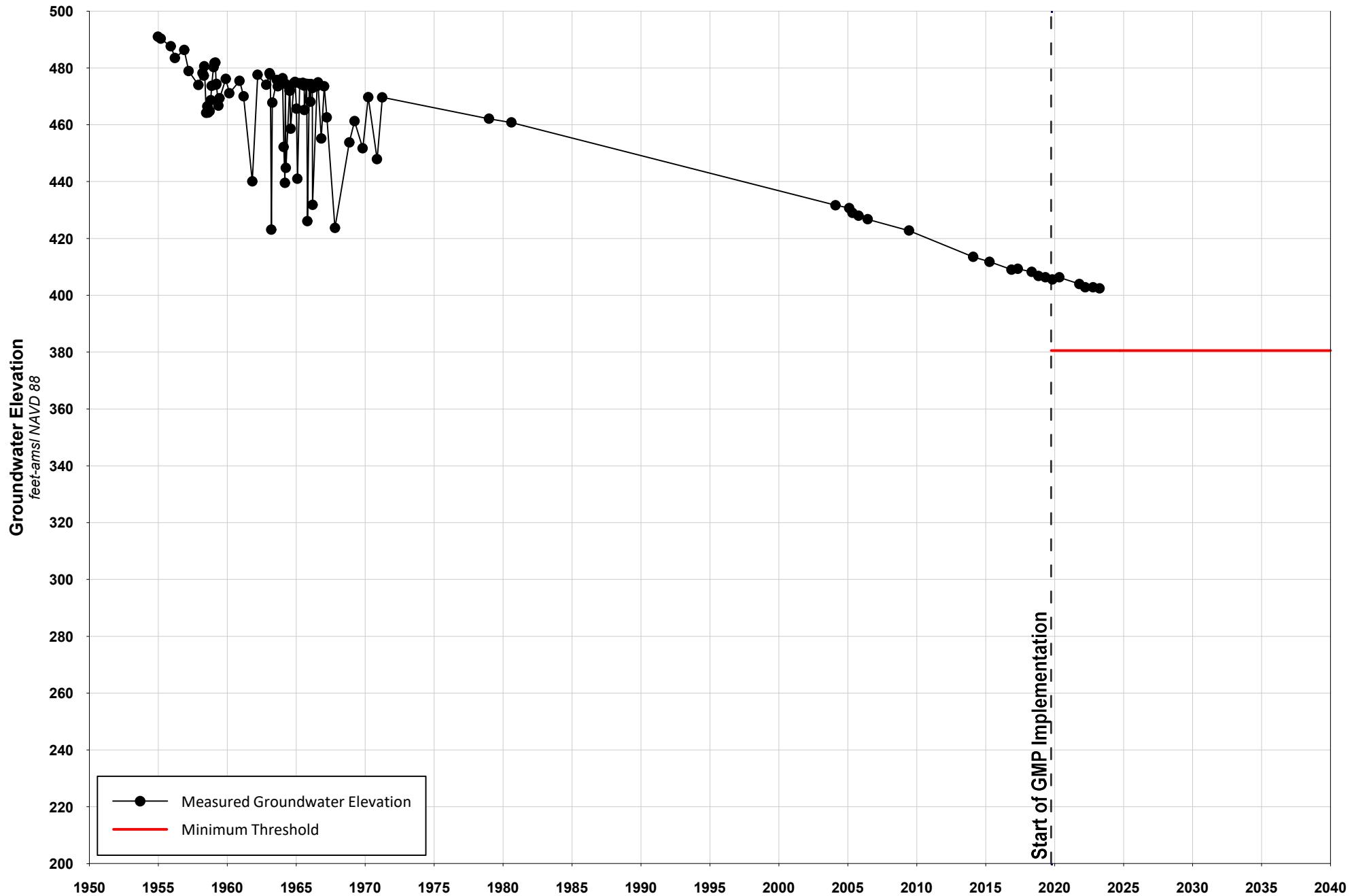


Figure 12a

Groundwater Level and Sustainable Management Criteria  
at Representative Monitoring Well Airport 2

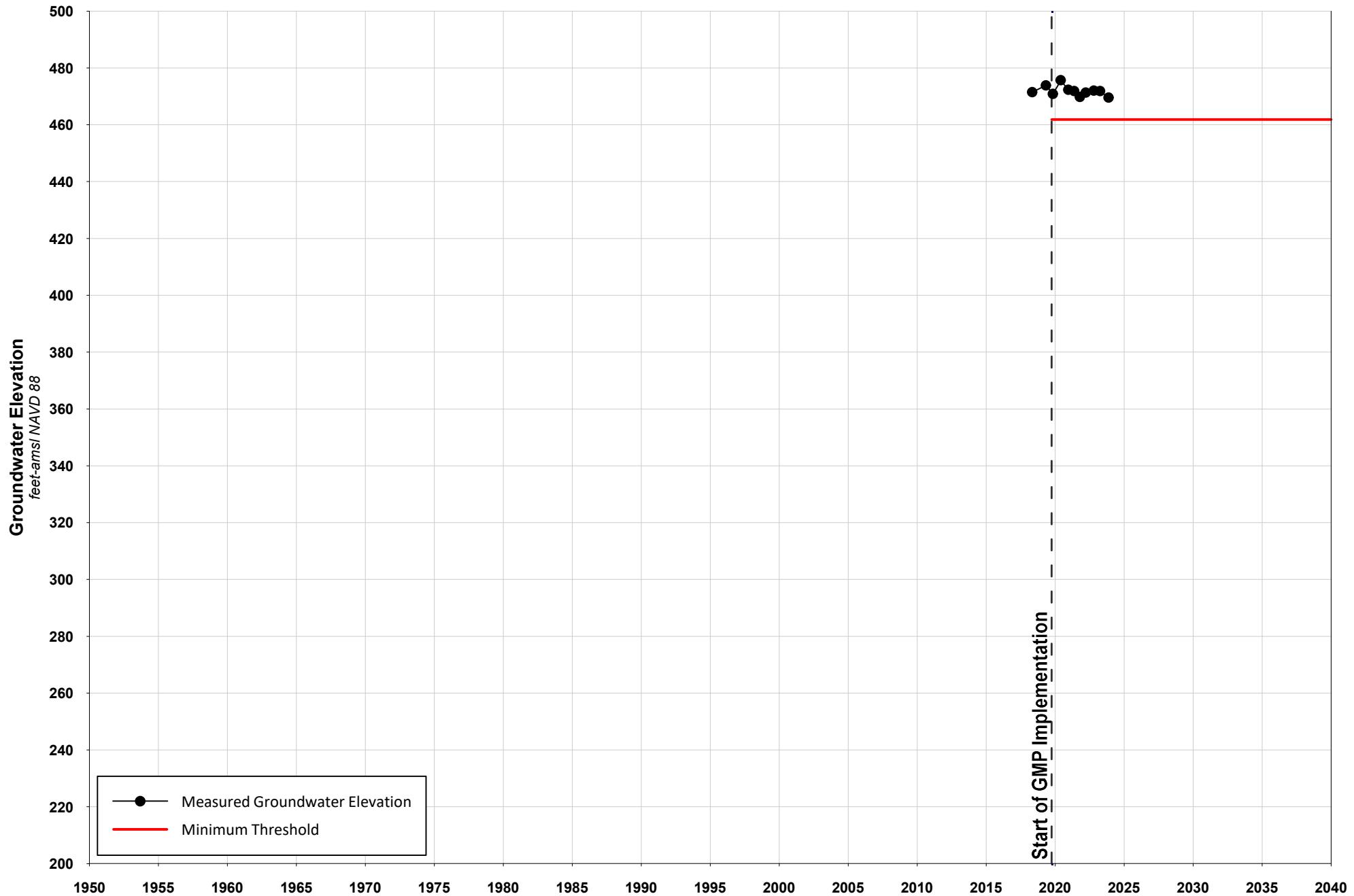


Figure 12b

Groundwater Level and Sustainable Management Criteria  
at Representative Monitoring Well Air Ranch 4

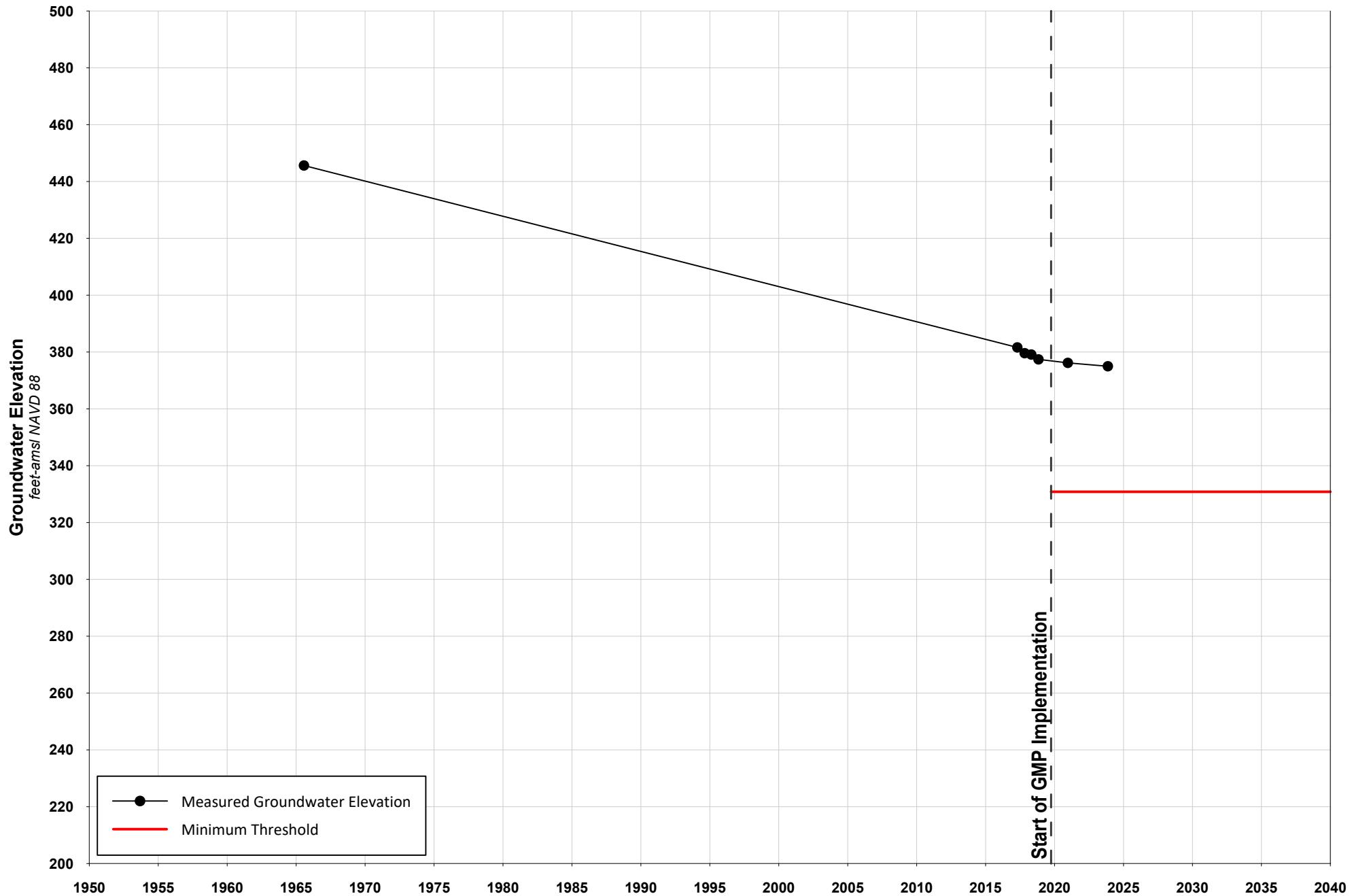


Figure 12c

Groundwater Level and Sustainable Management Criteria at Representative Monitoring Well Fortiner

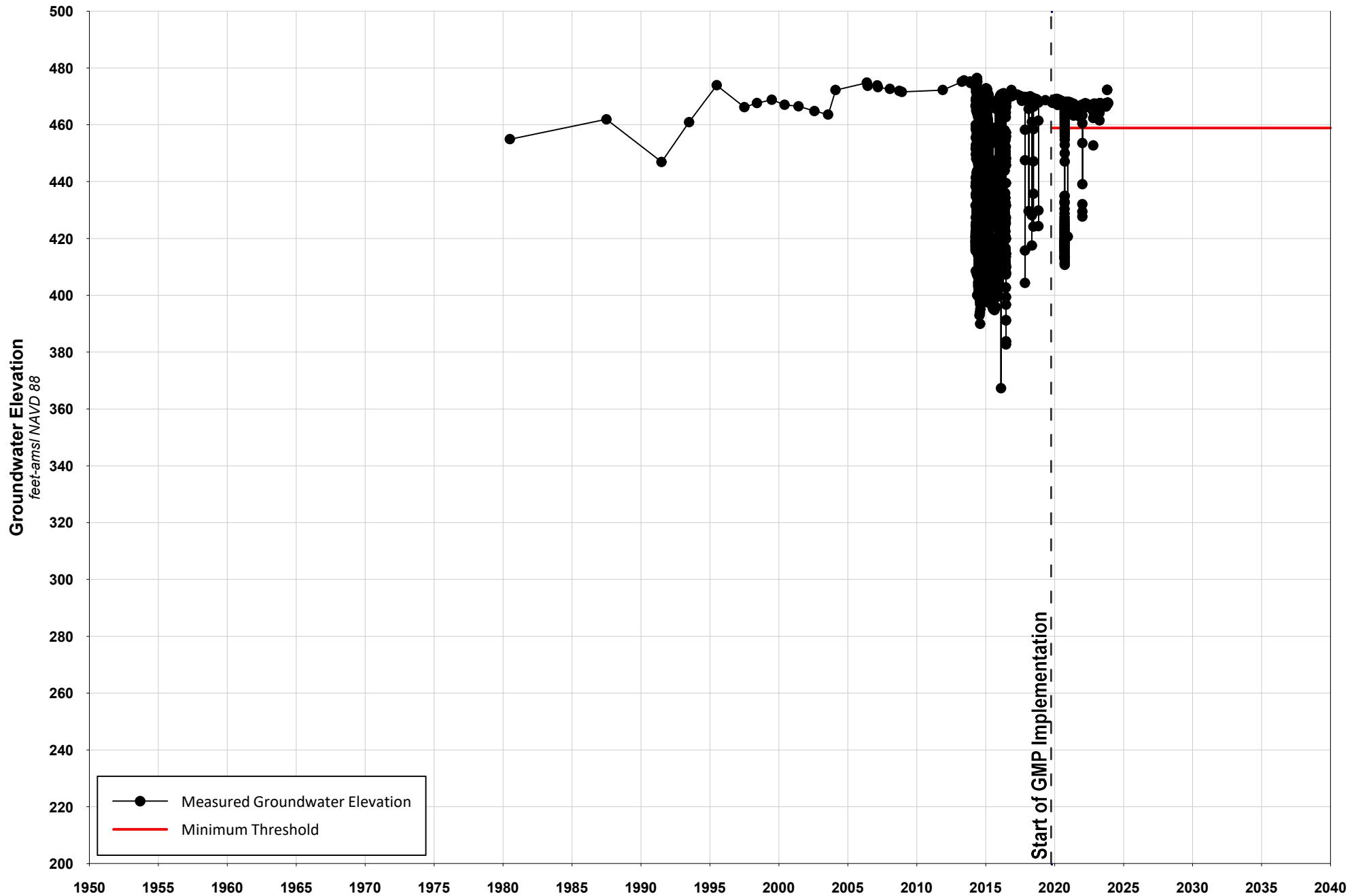


Figure 12d

Groundwater Level and Sustainable Management Criteria at Representative Monitoring Well RH-1

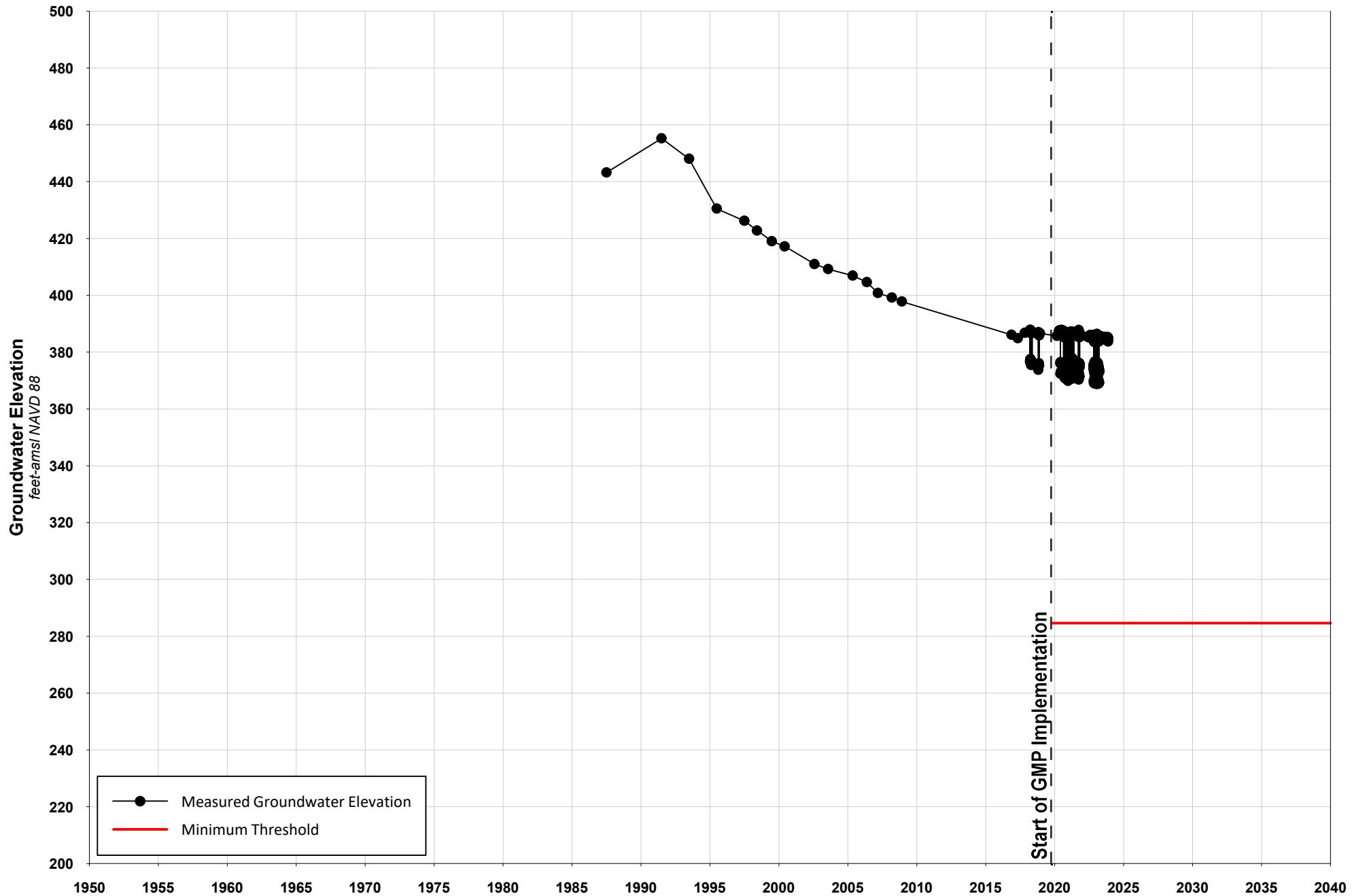


Figure 12e

Groundwater Level and Sustainable Management Criteria  
at Representative Monitoring Well ID1-12

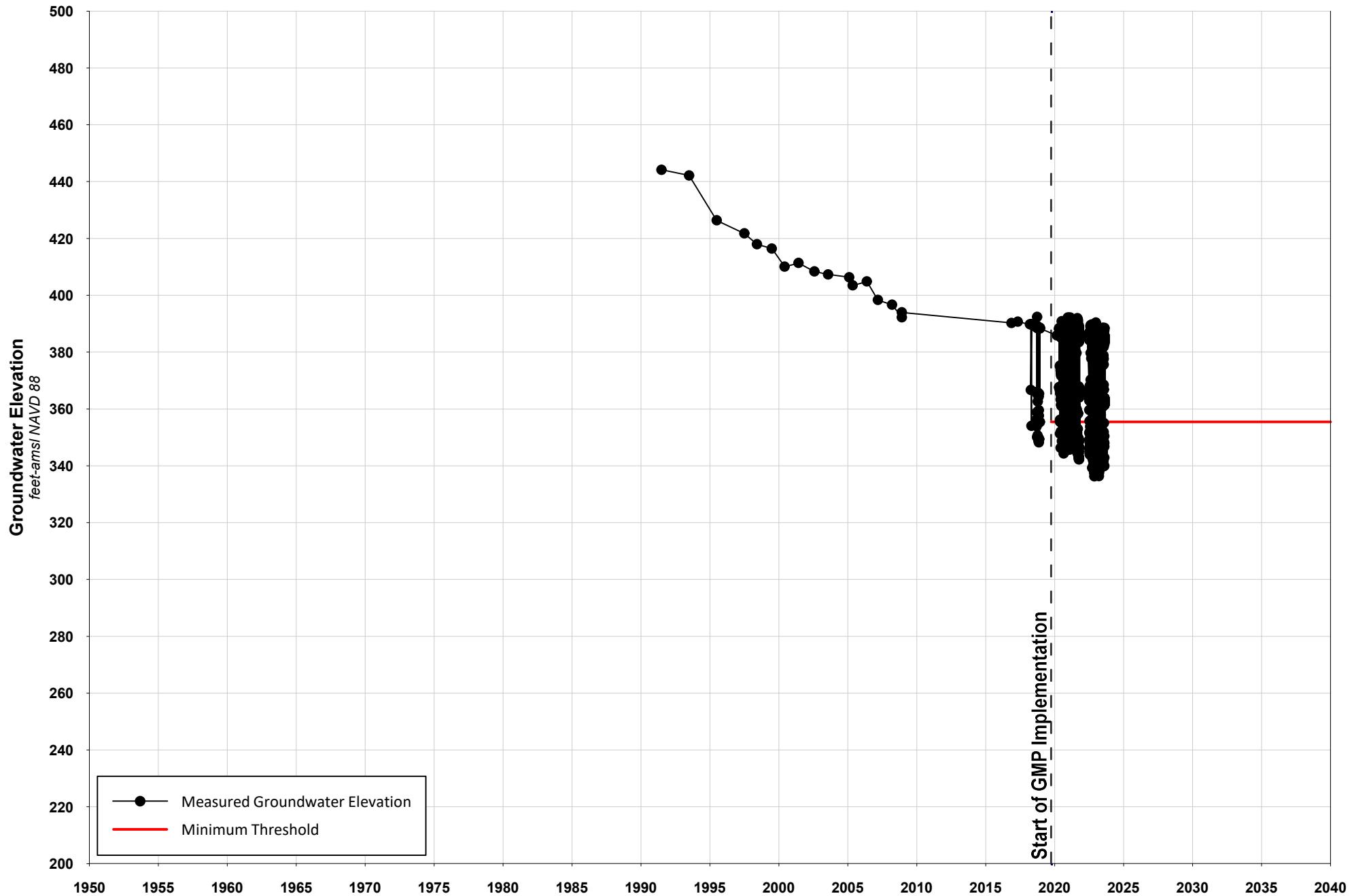


Figure 12f

Groundwater Level and Sustainable Management Criteria  
at Representative Monitoring Well ID1-16

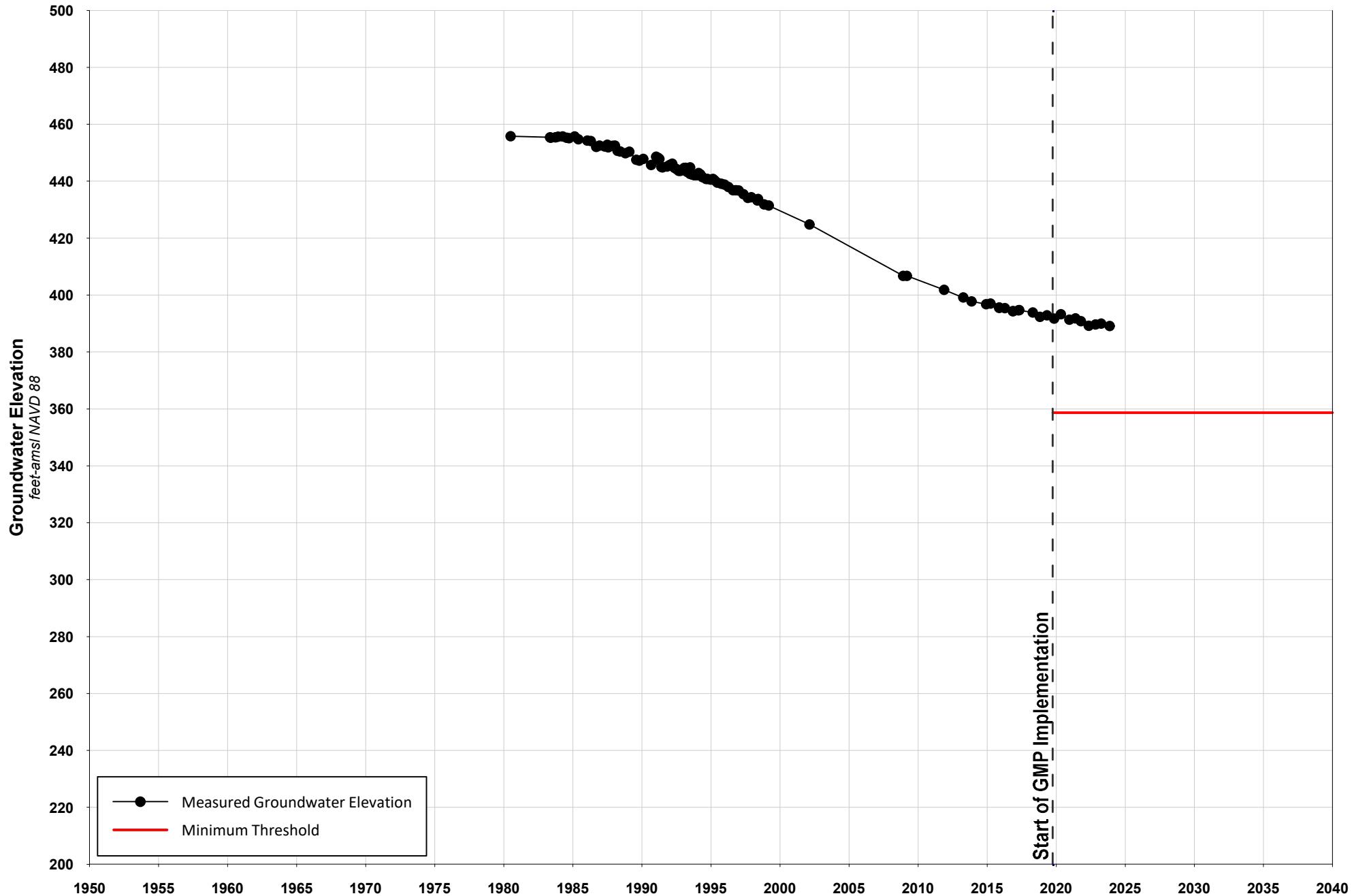


Figure 12g

Groundwater Level and Sustainable Management Criteria  
at Representative Monitoring Well ID4-1

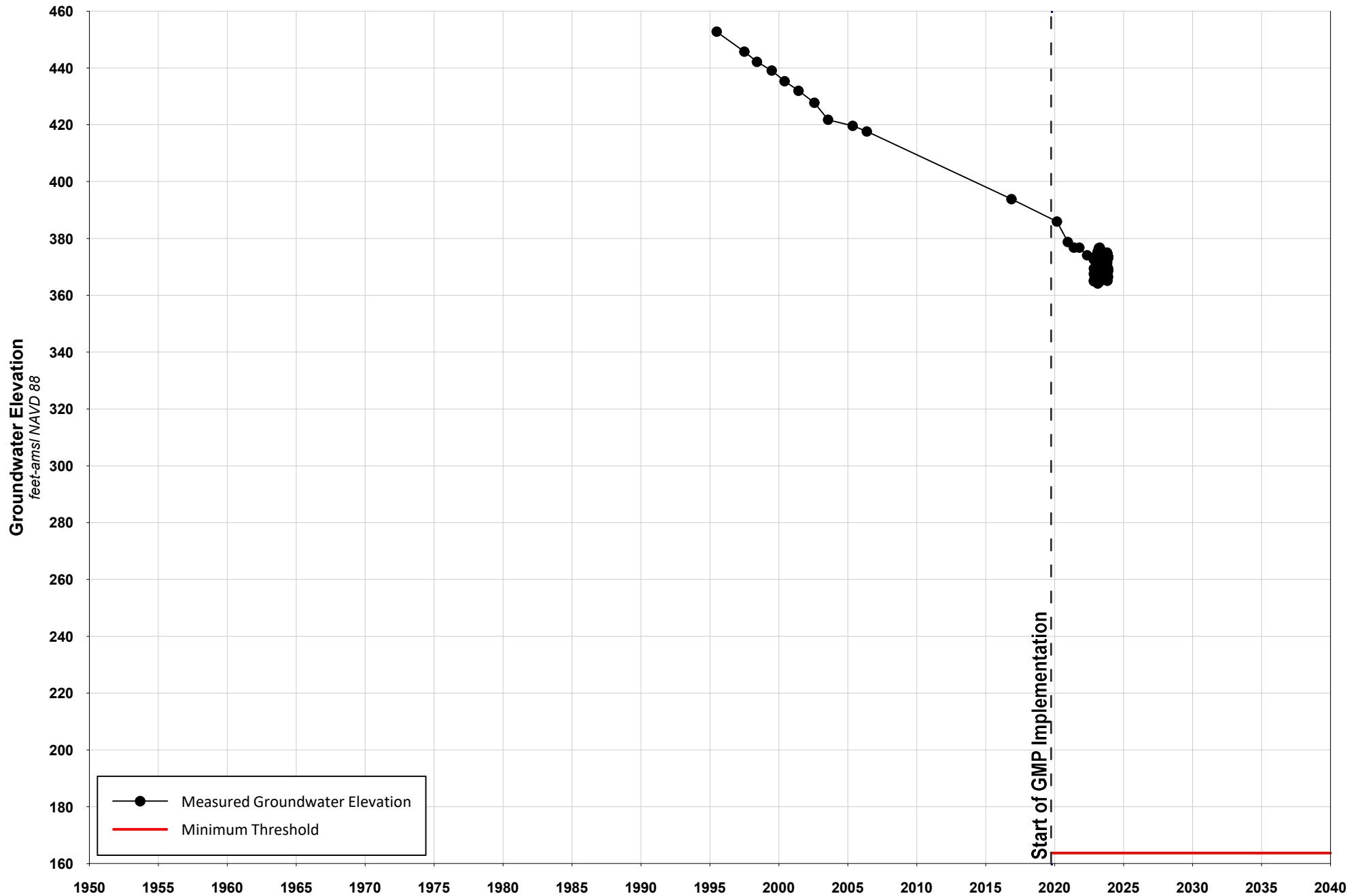


Figure 12h

Groundwater Level and Sustainable Management Criteria at Representative Monitoring Well ID4-11

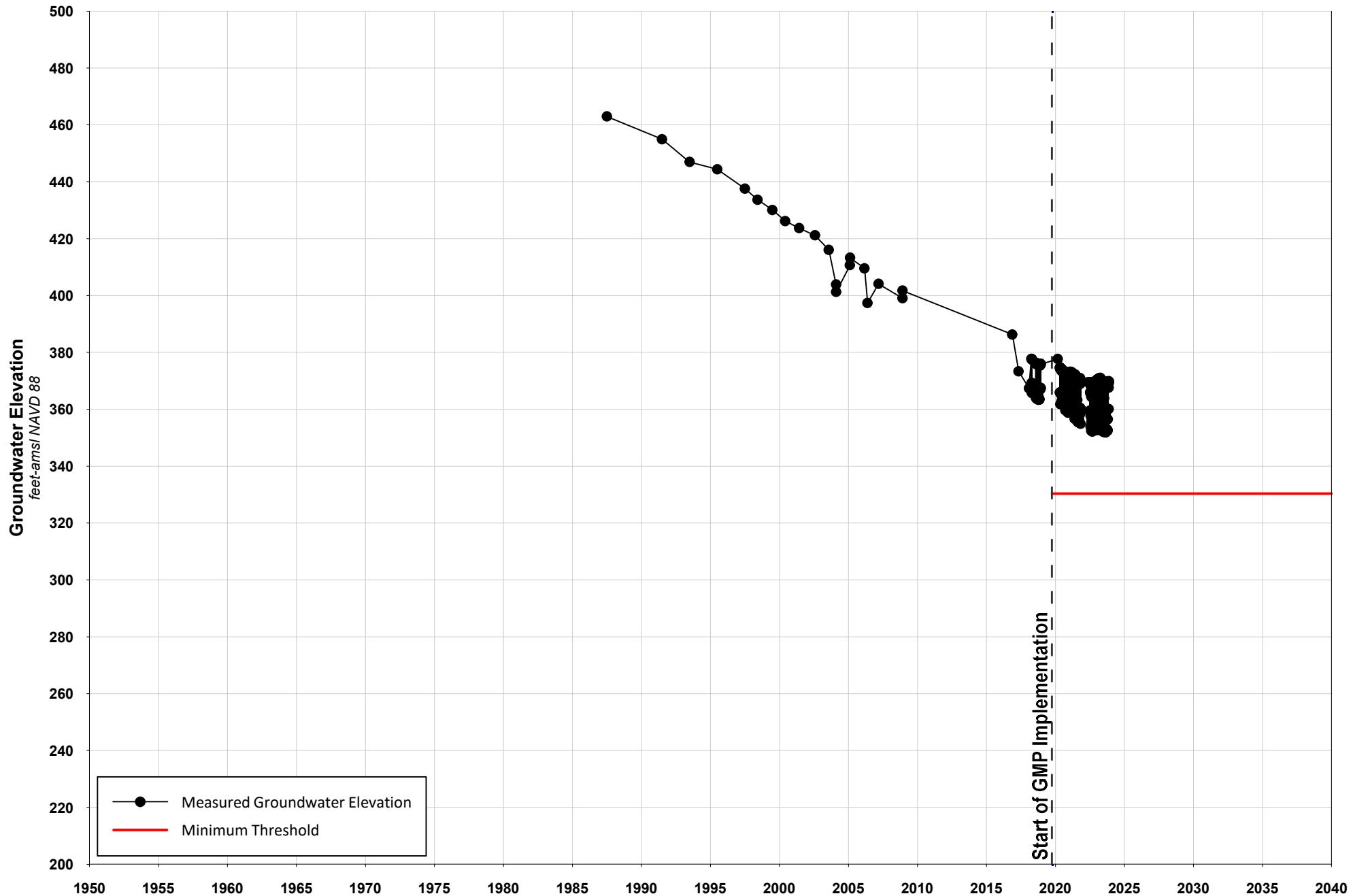


Figure 12i

Groundwater Level and Sustainable Management Criteria  
at Representative Monitoring Well ID4-18

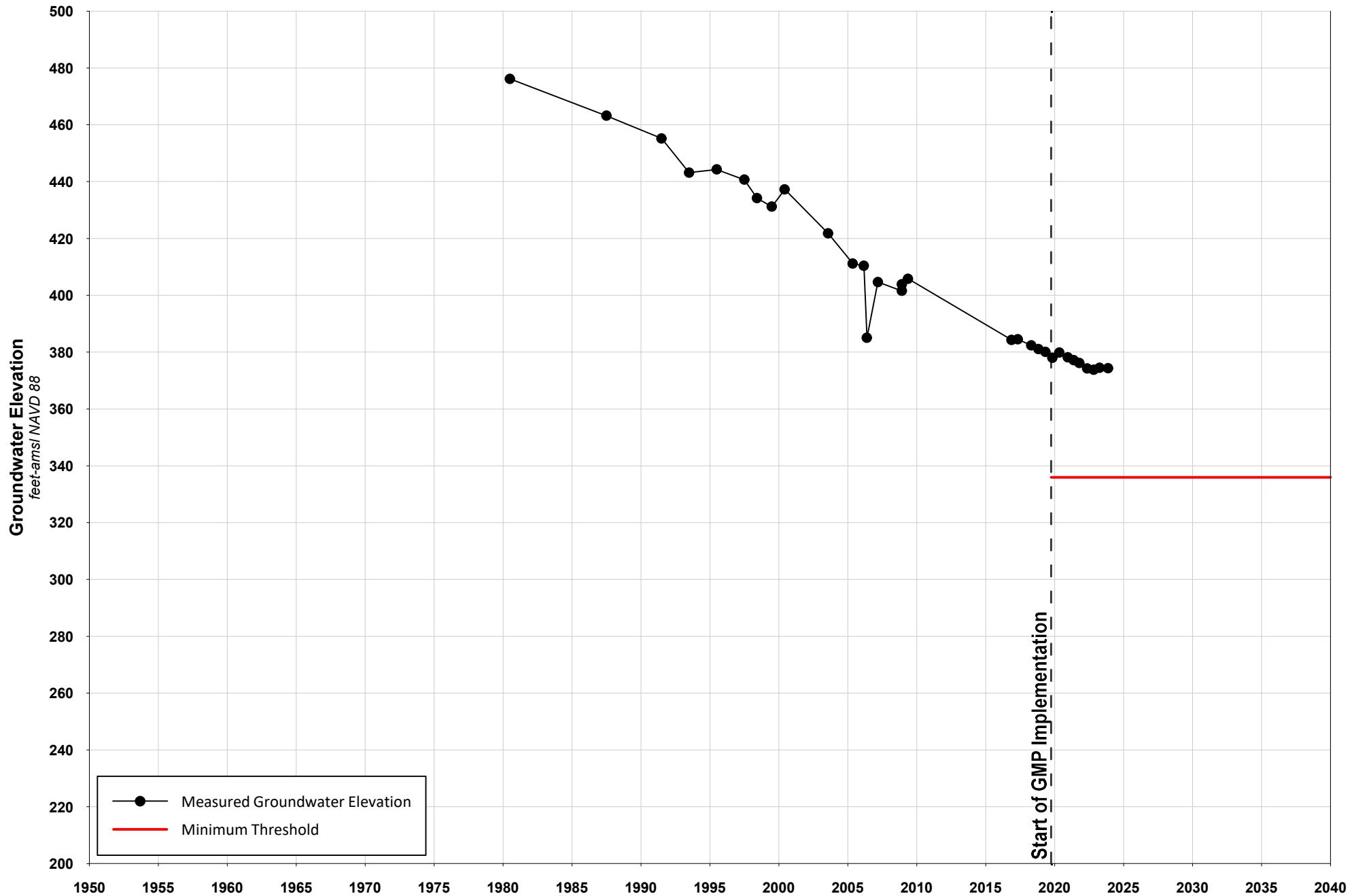
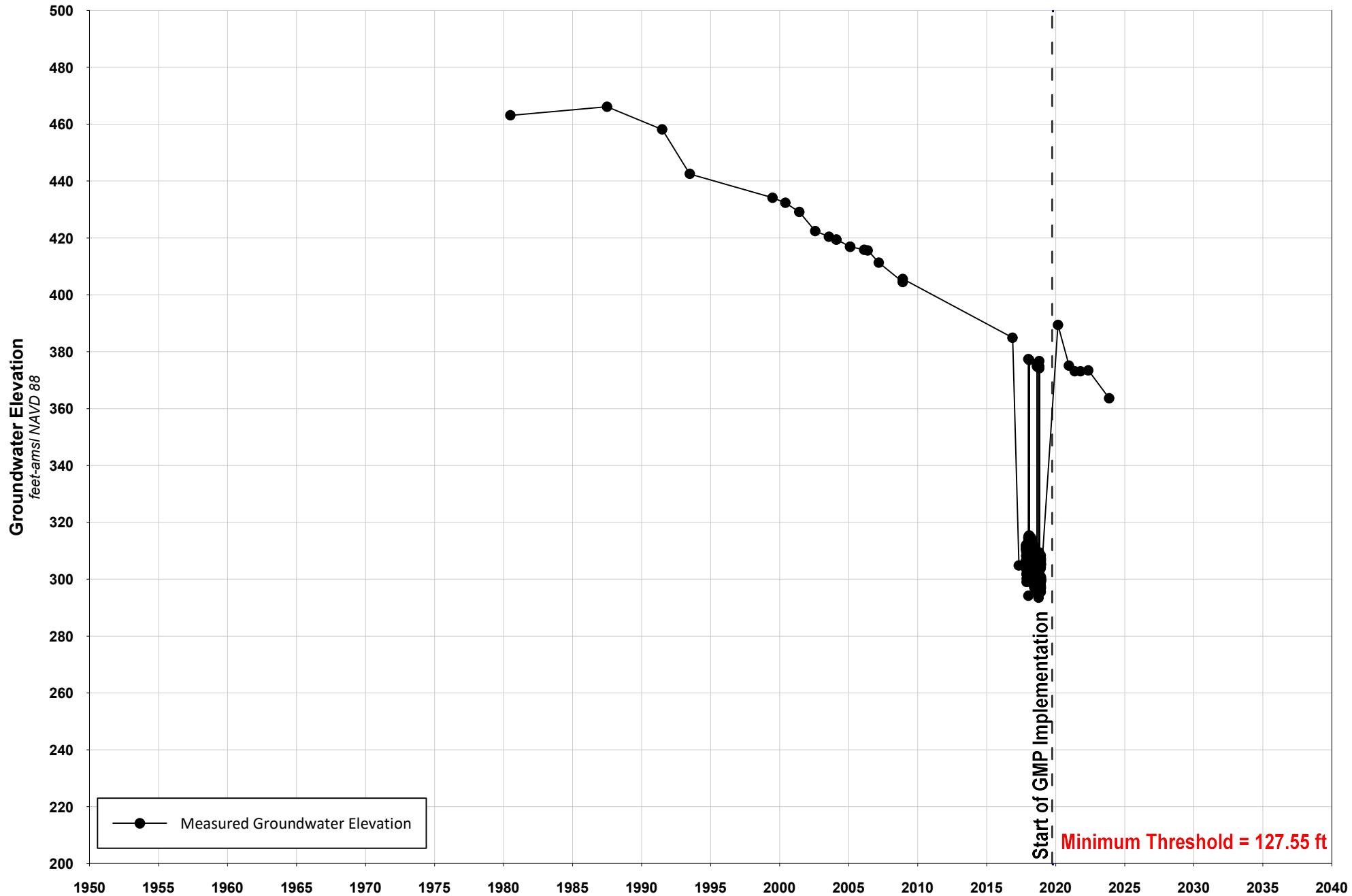


Figure 12j

Groundwater Level and Sustainable Management Criteria  
at Representative Monitoring Well ID4-3



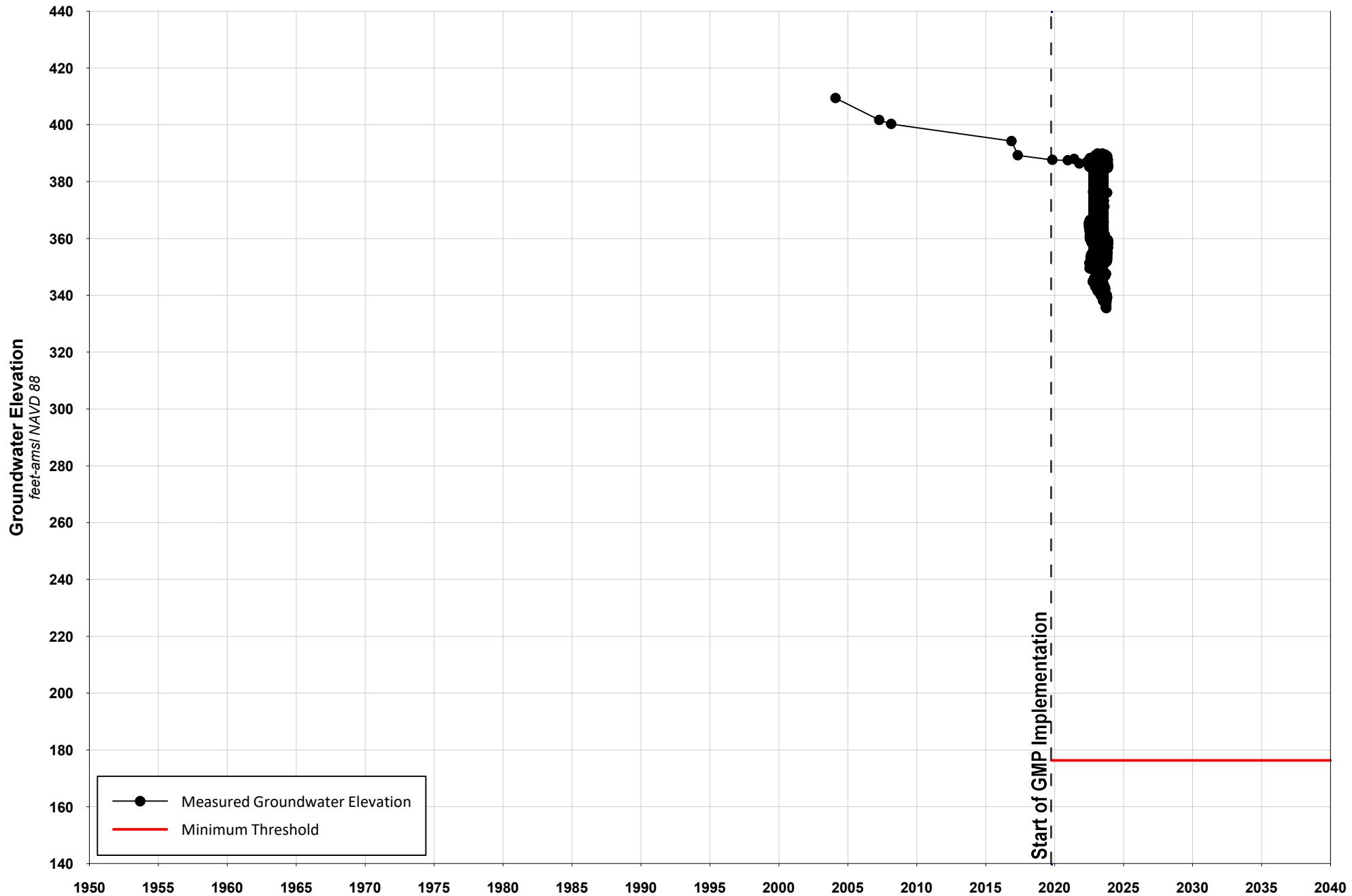


Figure 12I

Groundwater Level and Sustainable Management Criteria at Representative Monitoring Well ID5-5

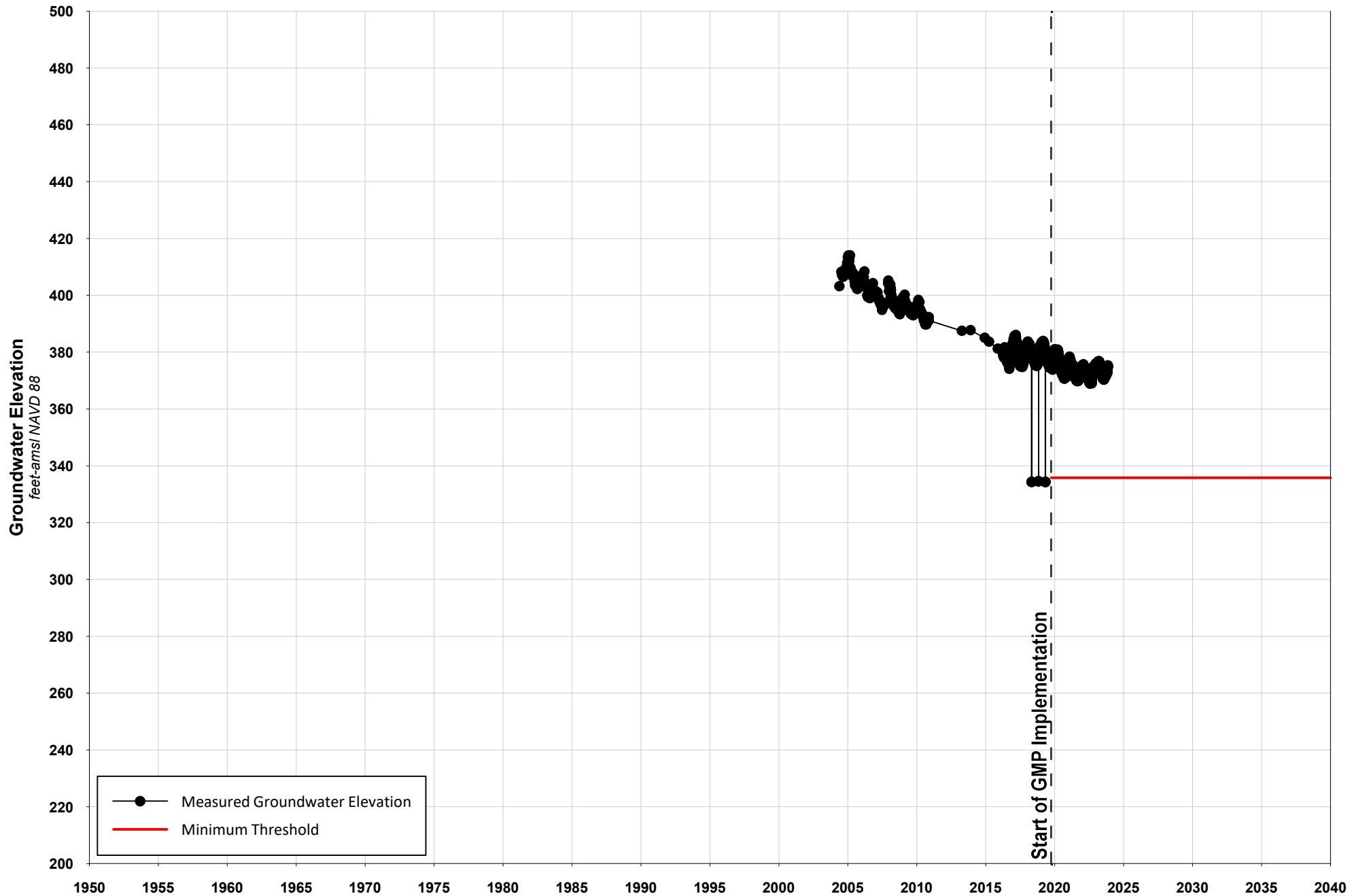


Figure 12m

Groundwater Level and Sustainable Management Criteria  
at Representative Monitoring Well MW-1

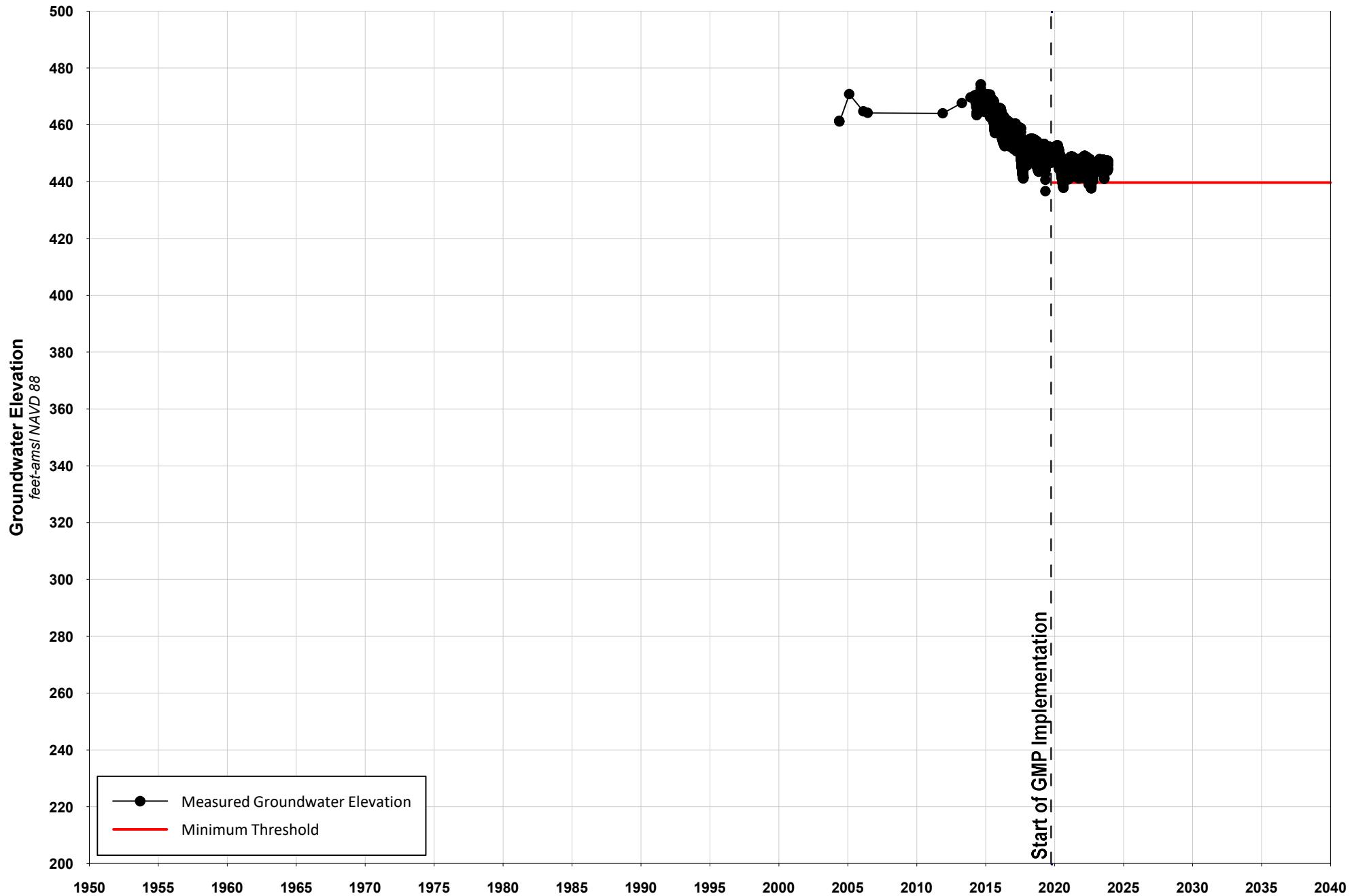


Figure 12n

Groundwater Level and Sustainable Management Criteria  
at Representative Monitoring Well MW-3

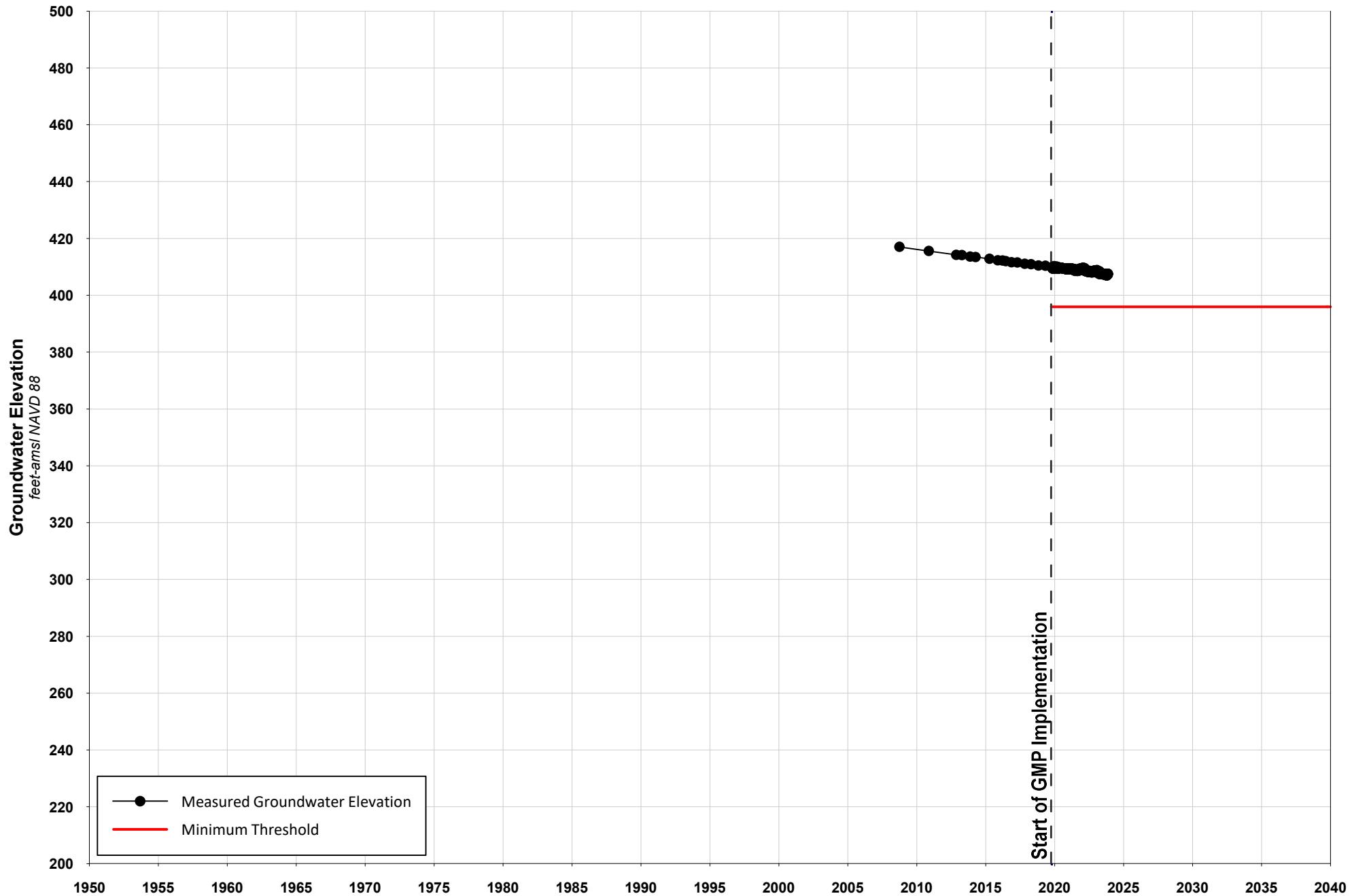


Figure 12o

Groundwater Level and Sustainable Management Criteria  
at Representative Monitoring Well MW-5A

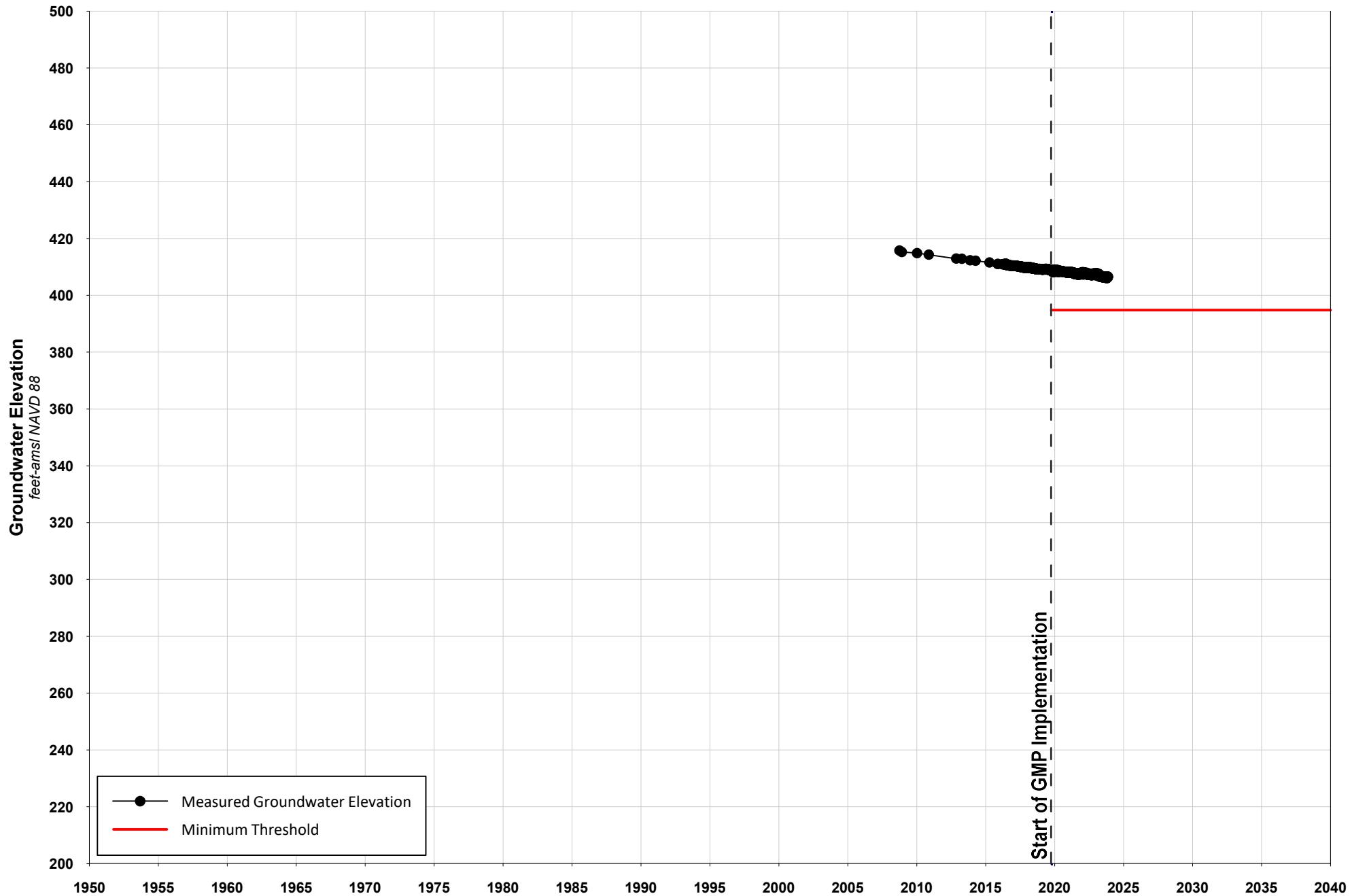


Figure 12p

Groundwater Level and Management Sustainable Criteria at Representative Monitoring Well MW-5B

**Table 19. Current Groundwater Elevations at Representative Monitoring Wells  
Compared to Minimum Threshold**

Local Well Name	State Well ID	Fall 2023 Groundwater Elevation <sup>(a)</sup> (ft-msl)	Minimum Threshold <sup>(b)</sup> (ft-msl)	Fall 2023 Groundwater Elevation minus Minimum Threshold (ft)
		<i>a</i>	<i>b</i>	<i>c = a-b</i>
<b>North Management Area</b>				
MW-1	010S006E21A002S	373.97	336	38.2
ID4-3	010S006E18R001S	374.34	336	38.4
Fortiner	010S006E09N001S	374.99	331	44.2
ID4-18	010S006E18J001S	369.66	330	39.3
ID4-4	010S006E29K002S	363.63	128	236.1
<b>Central Management Area</b>				
ID4-1	010S006E32R001S	389.11	359	30.5
Airport 2	010S006E35N001S	<i>401.96</i>	381	21.4
ID1-16	011S006E16N001S	382.13	355	26.7
ID4-11	010S006E32D001S	374.35	<i>164</i>	210.6
ID1-12	011S006E16A002S	385.14	285	100.5
ID5-5	011S006E09E001S	385.71	176	209.4
<b>South Management Area</b>				
MW-5A	011S007E07R001S	407.46	396	11.5
MW-5B	011S007E07R002S	406.43	395	11.6
MW-3	011S006E23J002S	447.12	438	9.4
Air Ranch	011S007E30L001S	469.55	462	7.7
RH-1	011S006E25A001S	467.38	459	8.5

(a) If a water level was not measured in Fall 2023, an "estimated static" groundwater elevation was selected based on recent trends in groundwater elevation at the well and nearby wells, and knowledge of the influence of nearby pumping. Estimated values are shown in *blue italic font*. In Fall 2023 is the Airport 2 well; the well casing collapsed prior to the Fall 2023 Semi-Annual Monitoring Event.

(b) *Italic values* are Minimum Thresholds established based on the top of the well screen. All other Minimum Thresholds are based on model results from the Borrego Valley Hydrologic Model (BVHM). All Minimum Thresholds in the GMP have been converted to feet above mean sea level.

**Table 20. Groundwater Level Trends at Representative Monitoring Wells**  
**Fall 2019 to Fall 2023**

Local Well Name	State Well ID	Fall 2019 Groundwater Elevation <sup>(a,b)</sup> (ft-msl)	Fall 2023 Groundwater Elevation <sup>(c)</sup> (ft-msl)	Change in Groundwater Elevation since Fall 2019 (ft)	Rate of Change Groundwater Elevation since Fall 2019 (ft/yr)	Historical Rate of Change in Groundwater Elevation <sup>(d)</sup> (ft/yr)
		<i>a</i>	<i>b</i>	<i>c = b-a</i>	<i>d = c/(2023 - 2019)</i>	
<b>North Management Area</b>						
MW-1	010S006E21A002S	374.76	373.97	-0.8	-0.2	-2.14
ID4-3	010S006E18R001S	377.96	374.34	-3.6	-0.9	-2.09
Fortiner	010S006E09N001S	<i>376.82</i>	374.99	-1.8	-0.5	-2.48
ID4-18	010S006E18J001S	<i>374.36</i>	369.66	-4.7	-1.2	-2.31
ID4-4	010S006E29K002S	<i>375.06</i>	363.63	-11.4	-2.9	-2.73
<b>Central Management Area</b>						
ID4-1	010S006E32R001S	391.66	389.11	-2.6	-0.6	-1.39
Airport 2	010S006E35N001S	405.60	<i>401.96</i>	-3.6	-0.9	-1.67
ID1-16	011S006E16N001S	<i>388.42</i>	382.13	-6.3	-1.6	-0.95
ID4-11	010S006E32D001S	<i>386.44</i>	374.35	-12.1	-3.0	-2.29
ID1-12	011S006E16A002S	<i>385.94</i>	385.14	-0.8	-0.2	-1.51
ID5-5	011S006E09E001S	387.64	385.71	-1.9	-0.5	-0.85
<b>South Management Area</b>						
MW-5A	011S007E07R001S	409.92	407.46	-2.5	-0.6	-0.74
MW-5B	011S007E07R002S	408.80	406.43	-2.4	-0.6	-0.74
MW-3	011S006E23J002S	451.68	447.12	-4.6	-1.1	-5.84
Air Ranch	011S007E30L001S	470.85	469.55	-1.3	-0.3	-0.5
RH-1	011S006E25A001S	467.87	467.38	-0.5	-0.1	-0.94

(a) Fall 2019 is the start of Physical Solution Implementation Period.  
 (b) If a Fall 2019 water level was not measured, an "estimated static" groundwater elevation was selected based on recent trends in groundwater elevation at the well and nearby wells, and knowledge of the influence of nearby pumping. Estimated values are shown in *blue italic font*.  
 (c) If a water level was not measured in Fall 2023, an "estimated static" groundwater elevation was selected based on recent trends in groundwater elevation at the well and nearby wells, and knowledge of the influence of nearby pumping. Estimated values are shown in *blue italic font*. In Fall 2023 is the Airport 2 well; the well casing collapsed prior to the Fall 2023 Semi-Annual Monitoring Event.  
 (d) Historical rate of change in groundwater level is based on pre-fall 2018 groundwater levels as reported in the GMP (Dudek, 2020).

## 5.5.2 Change in Groundwater Storage

This section describes the historical trends and current changes in groundwater storage in the Basin through WY 2023, the methods used to estimate storage changes, and compares the trends and current conditions to Minimum Threshold in the GMP to evaluate progress towards achieving sustainability.

### 5.5.2.1 Historical Trends and Current Conditions

The Basin is estimated to have a total storage capacity of approximately 5,500,000 af across all three layers of the aquifer system (upper, middle, and lower aquifers) (USGS, 1982). Since 1945, groundwater pumping in the Basin has exceeded recharge which caused long-term declines in groundwater levels and removal of groundwater in storage (i.e., conditions of overdraft).

Figure 13 is a time-series chart that depicts the estimates of annual and cumulative changes in storage that occurred in the Basin from 1945 to 2023. The chart shows that annual storage changes were both additions to storage and subtractions from storage. Additions to storage occurred infrequently during very wet years. Typically, annual changes in storage were subtractions due to the conditions of overdraft.

The chart is divided into parts to facilitate the comparison of groundwater storage changes to the Minimum Threshold for reductions in groundwater storage:

1. Storage changes that occurred prior to GMP implementation (1945-2019). The total reduction in storage was about -543,000 af over this 75-year period, an average of -7,241 afy.
2. Storage changes that occurred during GMP implementation (2020-2023). The total reduction in storage was about -12,710 af over this four-year period, an average of -3,178 afy.

The subsections below describe: (i) the methods that have been used to estimate storage changes, (ii) the estimate of storage change that occurred from spring 2022 to spring 2023, and (iii) the comparison of the cumulative storage change that occurred during GMP implementation (2020-2023) to the Minimum Threshold for reduction in groundwater storage as defined in the GMP.

### 5.5.2.2 Methods for Estimating Annual Change in Groundwater Storage

Two methods have been employed to estimate changes in groundwater storage in the Basin:

1. Groundwater-flow models can simulate the water budget of a groundwater basin, including changes in groundwater storage over time. To support the development of the GMP, BVHM runs were used to characterize the historical water budget of the Basin and the storage changes that occurred from 1945-2016 (Dudek, 2019). Figure 13 shows the BVHM estimates of annual storage change as light green bars.
2. Geographic Information System (GIS) methods were used to estimate annual storage changes from 2017-2023 to support the SGMA requirements for annual reporting. This method utilizes estimates of aquifer properties and measured changes in groundwater levels. Figure 13 shows the BVHM estimates of annual storage change as black bars from 2017-2023.

In 2021, the Watermaster convened the TAC to reevaluate the method described in (2) above and update the method if deemed appropriate. The TAC recognized the importance of employing a methodology that would produce future results that are consistent from year to year, would minimize the influence of the

method itself on the storage change results, and would include QA/QC steps to check on the reasonableness of the results. The agreed upon methodology to estimate the change in storage is documented in a TM (West Yost, 2022c) and is summarized below. At the time of discussion, the TAC recognized that the method currently relied on has limitations and should be re-evaluated following the 2025 Redetermination of the Sustainable Yield, in which results from the BVHM could be utilized to compare model results against manual calculations, revise the aquifer properties assigned to the storage grid, improve contouring, or make other improvements.

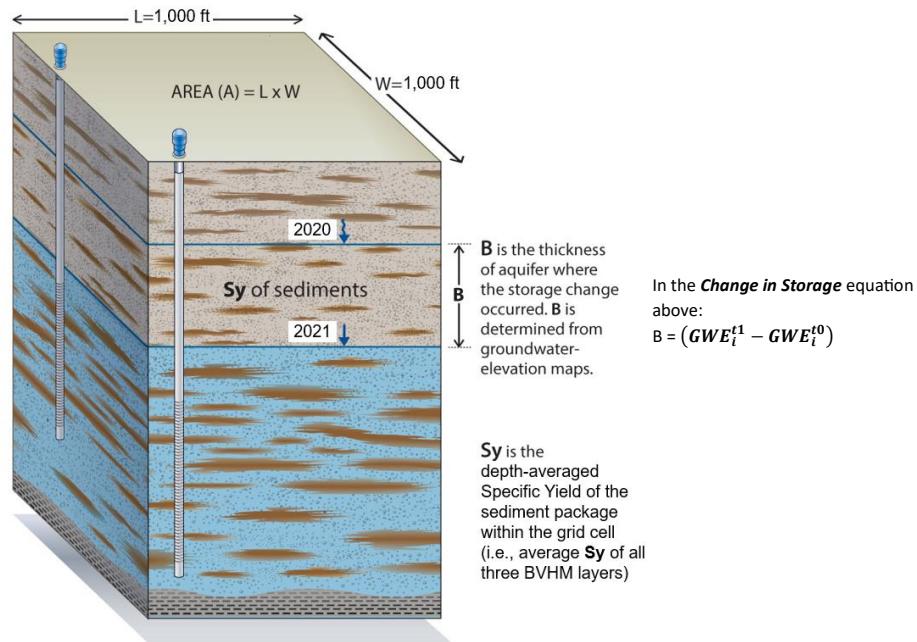
The information required to estimate storage change in the Basin for the current annual report includes:

- A groundwater elevation map for spring 2023 (Figure 10).
  - A groundwater elevation map for spring 2022 (Figure 14).
  - A uniform grid of 1,000 ft by 1,000 ft cells superimposed over the Basin area to assign groundwater elevations from Figures 10 and 14 and aquifer storage properties (Figure 15).
- The aquifer storage properties (i.e., specific yield) were derived from the BVHM.

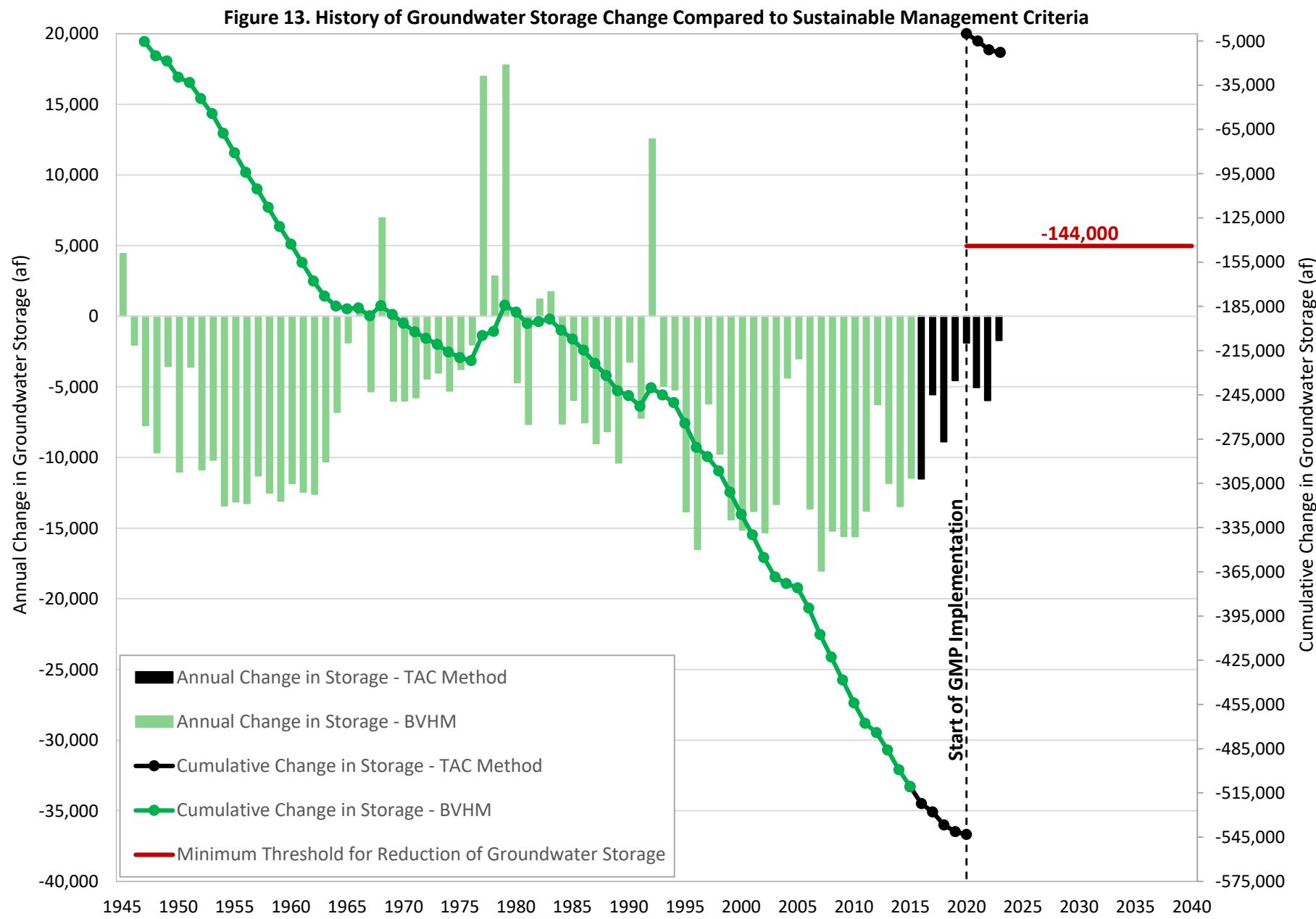
The annual change in storage is calculated at the grid-cell level using the following equation:

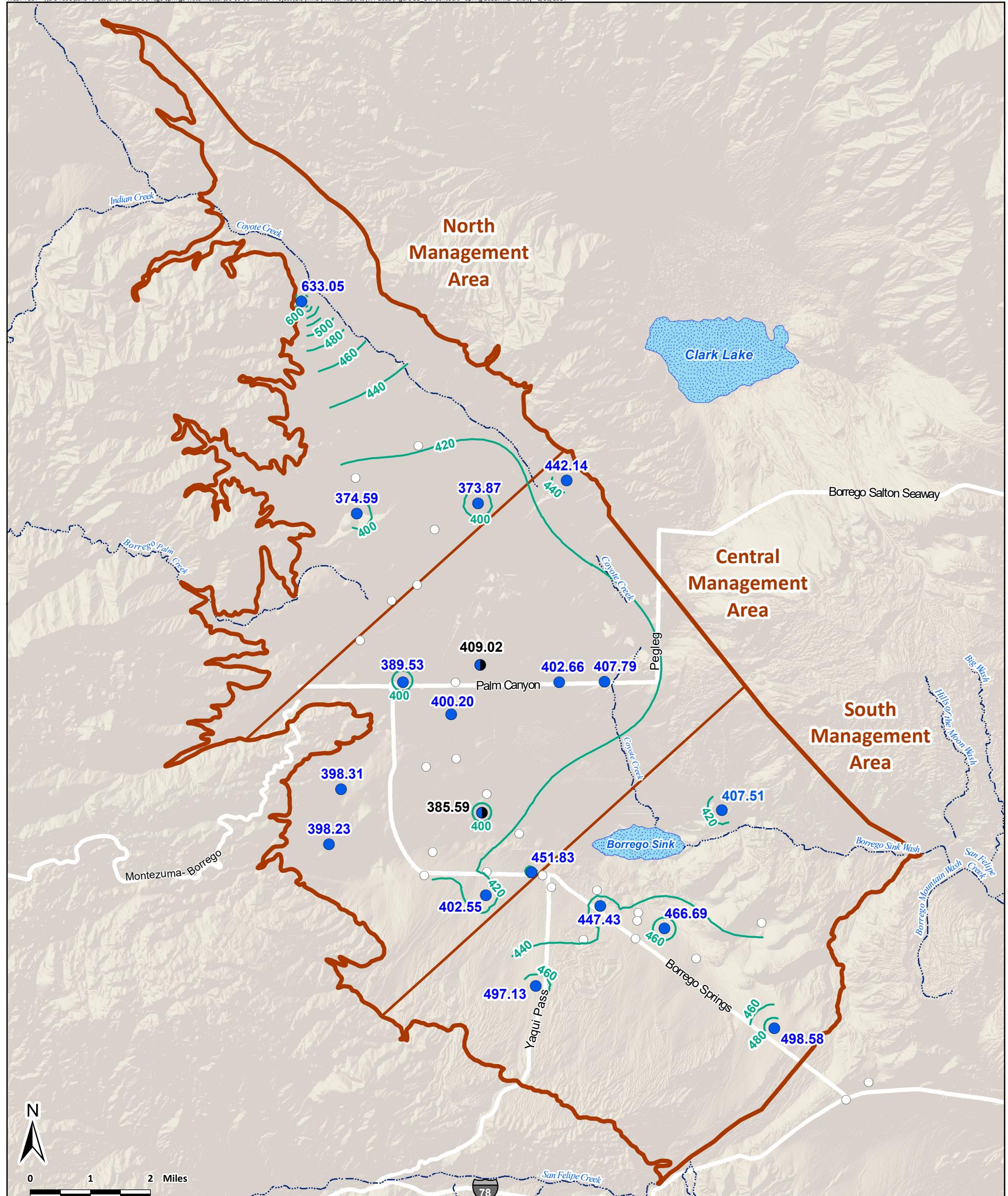
$$\text{Change in Storage}_i = (GWE_i^{t1} - GWE_i^{t0}) \times S_{y_i} \times A$$

where,  $i$  represents a unique cell within the storage change calculation grid,  $GWE$  is the interpolated groundwater elevation at cell  $i$ ,  $Sy$  is the specific yield defined at cell  $i$ ,  $A$  is the area of each cell, and  $t1$  and  $t0$  are the two years between which storage change is calculated.



The sum of the change in storage values by grid cell provides an estimate of the total annual change in groundwater storage in the Basin.





**Groundwater Monitoring Wells Used to Develop Groundwater Elevation Contours for Spring 2022**

- True static groundwater elevation (ft-amsl)
  - Estimated static groundwater elevation (ft-amsl)
- Groundwater Elevation Contours Spring 2022 (ft-amsl)**

**Other Features**

- Borrego Springs Subbasin with Management Area Divisions
- Other Groundwater Monitoring Wells

**Surface Water Features**

- Stream Channel

- Dry Lake



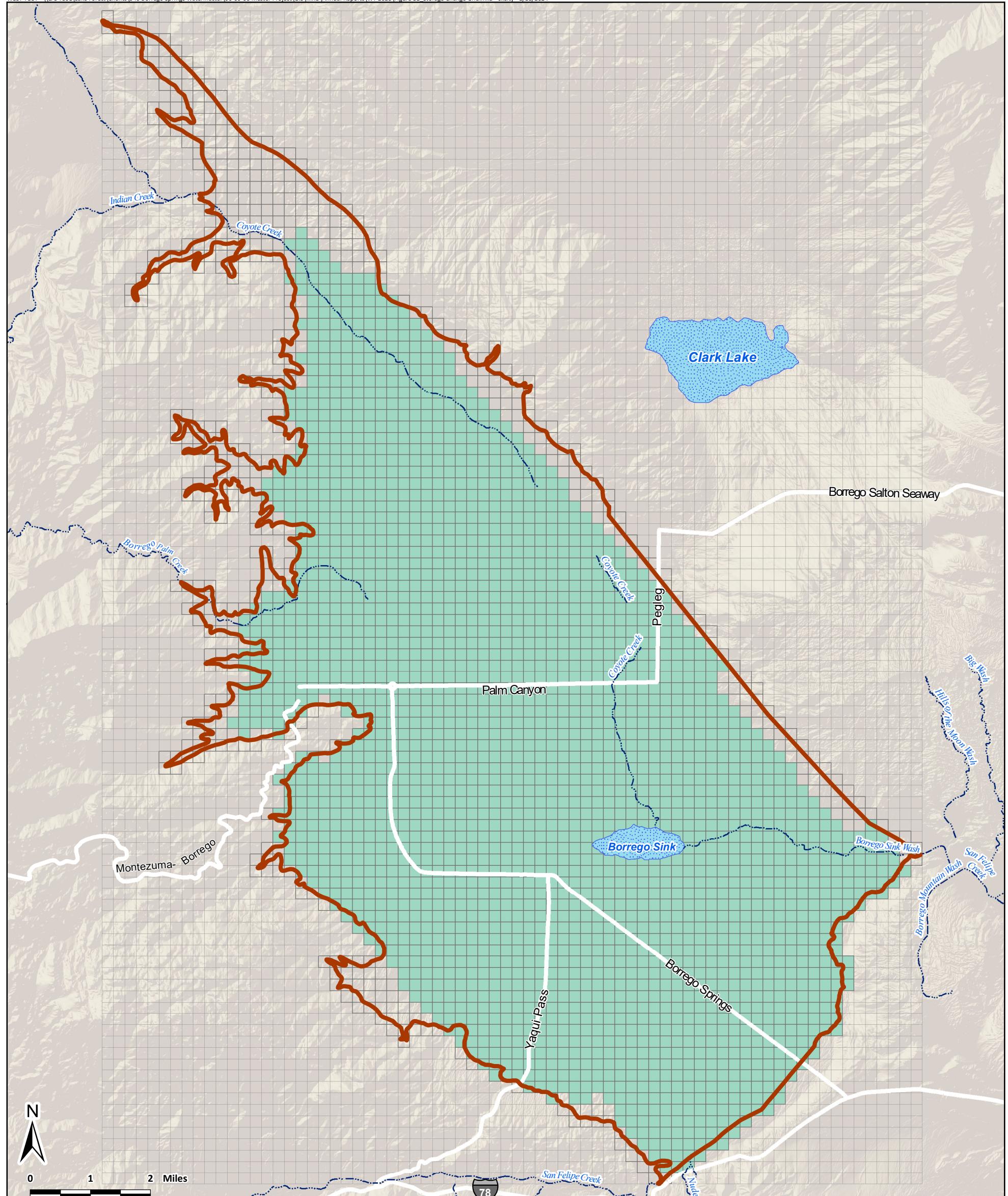
The groundwater-elevation contours shown on this map were prepared for the specific purpose of estimating groundwater storage change for the Annual Report, and should not be used for other purposes.

**Figure 14**

**Spring 2022  
Groundwater Elevation**  
Borrego Springs Watermaster  
Borrego Springs Subbasin  
2023 Annual Report

Prepared by:





Storage Change Grid  
(1000 ft x 1000 ft cell)



Grid Cells Used to Compute Storage Change



Borrego Springs Groundwater Subbasin (7-024.01)

#### Surface Water Features

Stream Channel



Dry Lake



Figure 15

Storage Change Grid and  
Area Used to Compute Storage Change

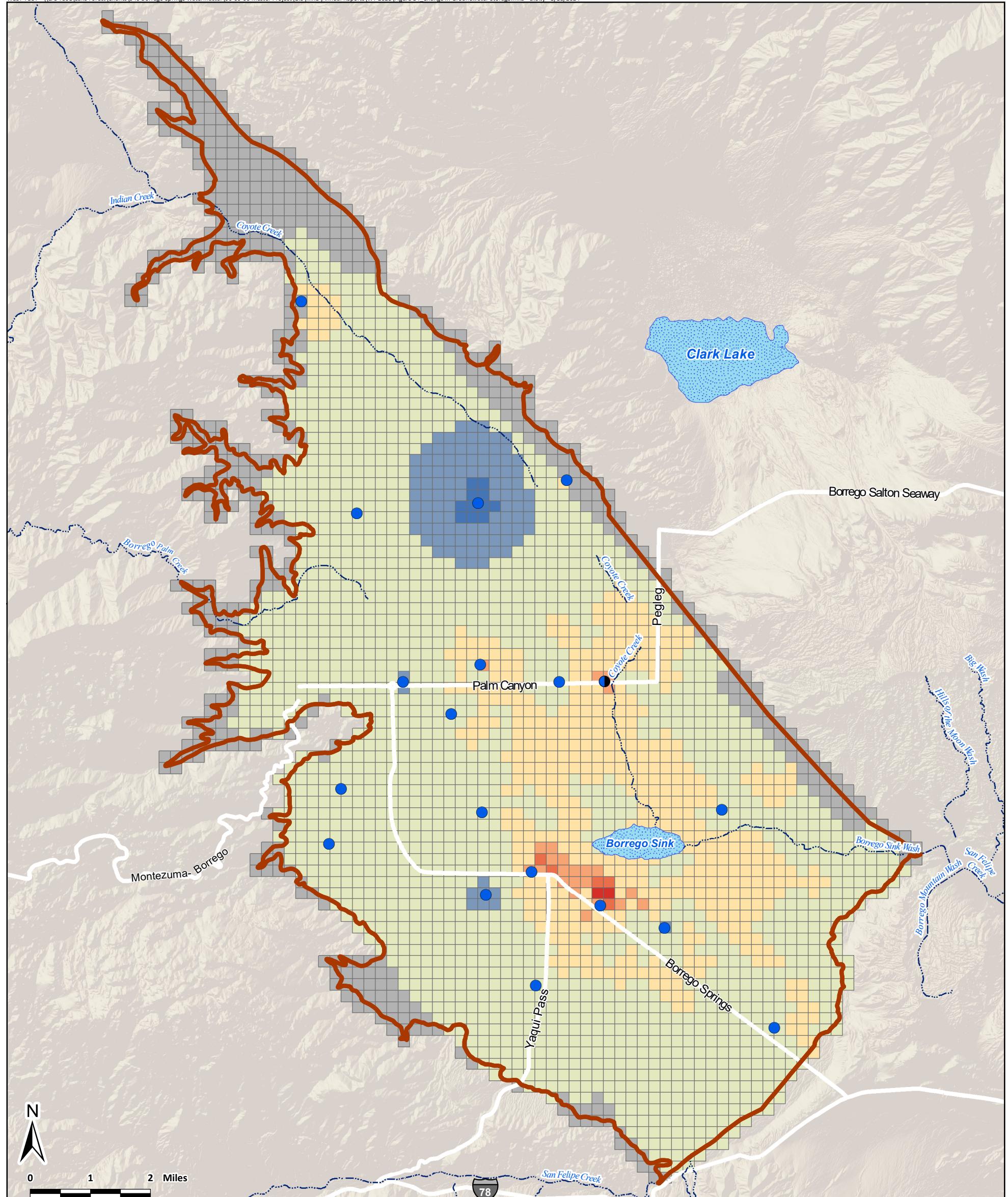
Borrego Springs Watermaster  
Borrego Springs Subbasin  
2023 Annual Report

Prepared by:



### **5.5.2.3 Annual and Cumulative Change in Storage**

Figure 16 is a map that shows the spatial distribution of the change in groundwater storage from spring 2022 to spring 2023. Also shown on Figure 16 are the wells with representative groundwater elevation data in both spring 2022 and spring 2023 that were used to estimate the change in storage. The total change in storage from spring 2022 and spring 2023 was approximately -1,705 af (a decrease of groundwater in storage). This change in storage is consistent with the observation in Section 5.5.1 that groundwater levels across most of the Basin continued to decline through WY 2023. However, the rate of storage change decreased in spring 2022 to spring 2023 compared to the previous seven-year period. Previously, the rate of storage change had been relatively constant, despite a decline in production, which was likely due to the long-term drought in the southwestern United States (as displayed in the precipitation record on Figure 4). The reduced rate of groundwater storage decline during spring 2022 to spring 2023 was likely due to greater than normal precipitation during WY 2023 and reduced groundwater pumping.



**Groundwater Monitoring Wells with Measured Groundwater Elevation in Spring 2022 and Spring 2023**

- True static groundwater elevation (ft-amsl)
- Estimated static groundwater elevation (ft-amsl)

**Groundwater Storage Change**

Spring 2022 to Spring 2023 (af)

> -4	0
-4 to -3	0 to 1
-3 to -2	1 to 2
-2 to -1	
-1 to 0	

**Borrego Springs Groundwater Subbasin (7-024.01)**

**Surface Water Features**

Stream Channel

Dry Lake



**Figure 16**

**Change in Groundwater Storage**  
**Spring 2022 to Spring 2023**

**Borrego Springs Watermaster**  
Borrego Springs Subbasin  
2023 Annual Report

Prepared by:

## Water Year 2023 Annual Report for the Borrego Springs Subbasin

Table 21 summarizes the annual and cumulative change in storage for spring 2015 through spring 2023, as required by the SGMA annual reporting requirements. As shown in Table 21, the total volume of groundwater in storage decreased by approximately 45,082 af over the eight-year period.

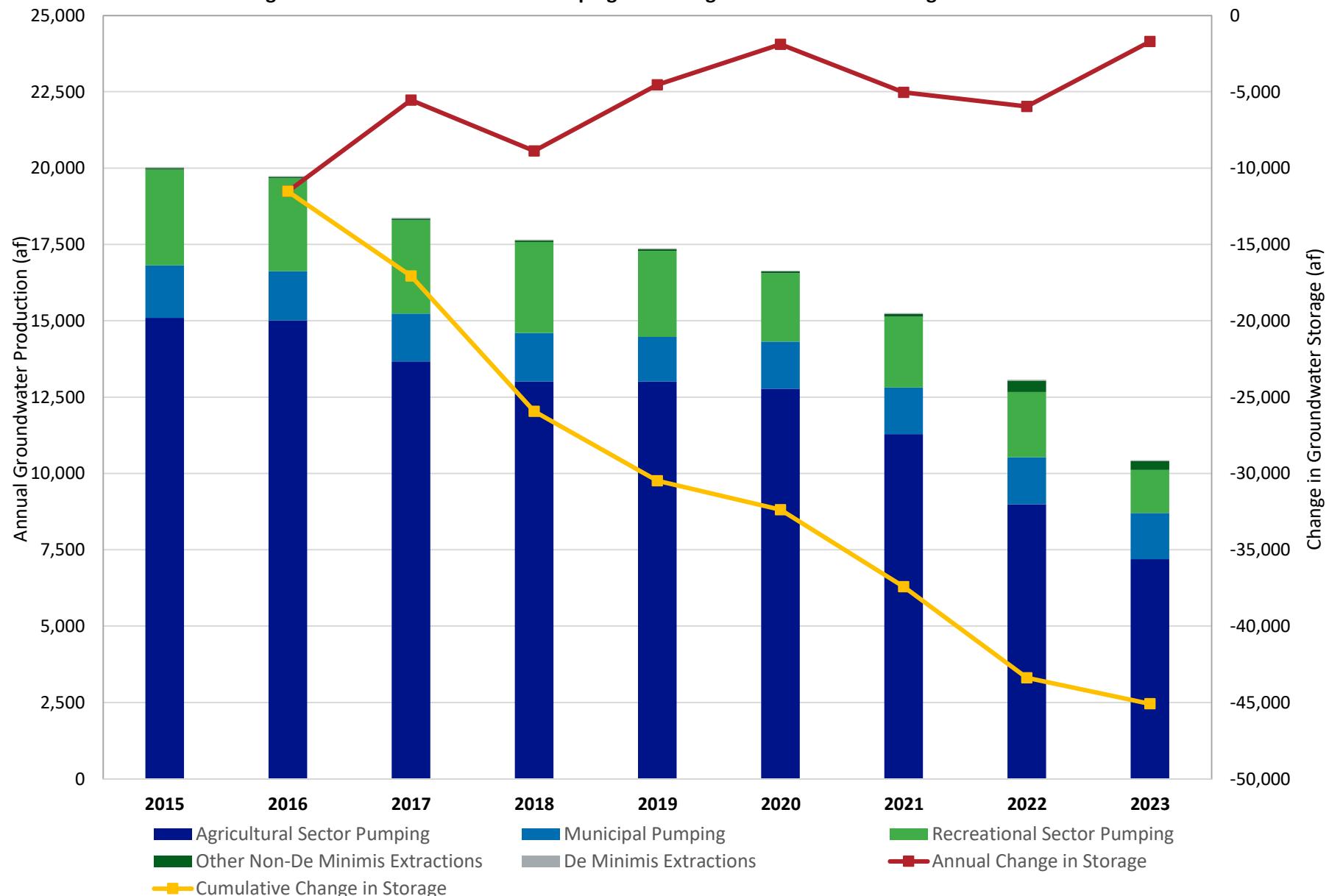
**Table 21. Annual and Cumulative Change in Groundwater, af**

Period	Annual Change in Storage	Cumulative Change in Storage
Spring 2015 to Spring 2016	-11,517	-11,517
Spring 2016 to Spring 2017	-5,544	-17,061
Spring 2017 to Spring 2018	-8,876	-25,937
Spring 2018 to Spring 2019	-4,545	-30,482
Spring 2019 to Spring 2020 <sup>80</sup>	-2,293	-32,775
Spring 2020 to Spring 2021	-5,040	-37,815
Spring 2021 to Spring 2022	-5,965	-43,377
Spring 2022 to Spring 2023	-1,705	-45,082

Figure 17 is a time-series chart that compares the annual and cumulative change in storage with annual groundwater pumping from 2015 through 2023.

<sup>80</sup> The revised storage change methodology described herein was used to re-compute the change in groundwater storage for spring 2019 to spring 2020. This changed the estimate reported in the 2020 Annual Report from a decline in storage of 1,890 af to a decline in storage of 2,293 af.

**Figure 17. Annual Groundwater Pumping and Change in Groundwater Storage – 2015 to 2023**



#### 5.5.2.4 Comparison to Sustainable Management Criteria

Changes in groundwater storage are highly correlated with changes in groundwater levels; hence, the Minimum Threshold for reductions in groundwater storage were established using the same methodology as was used to establish the Minimum Thresholds for groundwater elevations by using the results from the BVHM.<sup>81</sup>

The Minimum Threshold for reduction in groundwater storage is about -144,000 af by 2040. Figure 13 shows the Minimum Threshold compared to the cumulative storage change that occurred during the first four years of GMP implementation (2020-2023), which was a reduction in storage of about -12,700 af (or about 3,175 afy).

#### 5.5.3 Groundwater Quality

This section describes the historical trends and current conditions for groundwater quality for the five constituents of concern (COC) in the GMP through WY 2023 and compares the trends and current conditions to the relevant primary and secondary maximum contaminant levels (MCL)<sup>82</sup> for each COC.

Historically, groundwater quality was routinely monitored by the BWD at municipal supply wells, with additional monitoring activities conducted by the DWR and the USGS at various other wells. Based on the monitoring results, the GMP identified five COCs in the Basin: total dissolved solids (TDS), nitrate, arsenic, sulfate, and fluoride. The COCs are sourced from both anthropogenic and natural sources in the Basin. Anthropogenic sources of these COCs include use of pesticides and fertilizers, irrigation practices that result in concentrated return flows to the aquifer system, and septic system return flows (Dudek, 2020a). Natural sources of these COCs are dissolution of aquifer-system sediments which contain evaporites, silicates, fluoride-bearing minerals, and sulfates (Dudek, 2020a). Evaporation and evapotranspiration of shallow groundwater by phreatophytes can also concentrate dissolved constituents in groundwater.

Historical publications on groundwater quality have noted the following observations and trends:

- The highest concentrations of nitrate and TDS are found in the upper aquifer, primarily in the northern portion of the Basin, where most agricultural activities occur (Faunt et al., 2015).
- Increases in TDS and sulfate concentrations were associated with groundwater-elevation declines (Faunt et al., 2015).
- Increases in arsenic concentrations were associated with groundwater-elevation declines in the South Management Area (Dudek, 2020a).
- High concentrations of TDS and sulfate have been observed in groundwater near the Borrego Sink (Dudek, 2020a).
- Fluoride concentrations in the Basin are typically below the MCL (Dudek, 2020a).

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<sup>81</sup> The Minimum Threshold for the depletion of groundwater in storage is presented in Section 3.3.2 of the GMP.

<sup>82</sup> MCLs are standards for groundwater quality set by the U.S. EPA and the California State Water Resources Control Board. An MCL is the legal threshold limit for the amount of a substance that is allowed in public water systems under the Safe Drinking Water Act (Federal and State).

## Water Year 2023 Annual Report for the Borrego Springs Subbasin

The GMP established narrative Minimum Thresholds for groundwater quality to protect existing and potential beneficial uses and establishes separate Minimum Thresholds for municipal/domestic wells and agricultural wells. For municipal and domestic wells, the goal is for groundwater quality to meet potable drinking water standards specified in Title 22 of the CCR (e.g. MCL). For irrigation wells, the goal is for groundwater quality to meet standards that are “suitable for agriculture use.” In terms of the standards suitable for agricultural use, specific concentrations for each COC were not explicitly defined in the GMP. As part of the 5-year Assessment of the GMP, more specific Minimum Thresholds for agriculture wells will be considered and recommended for each COC. Because of the lack of quantified Minimum Thresholds to compare against current conditions of groundwater quality in agricultural wells, groundwater quality for all wells in the Basin are compared to MCLs in this Annual Report.

Since the implementation of the GMP, the Watermaster has collected and analyzed groundwater-quality samples on a semi-annual frequency from wells in the groundwater-quality monitoring network (see well locations on Figure 2). The groundwater-quality data are used to describe current conditions and seasonal and/or long-term trends in groundwater quality for the COCs in the Basin. In WY 2023, groundwater-quality samples were collected in October 2022 and April 2023 (see Table 8). Following each monitoring event, Watermaster staff prepared a summary of the monitoring results and presented it to the Board. The results from the spring 2023 semi-annual sampling event are shown in Table 22 and Figures 18 through 22, where they are also compared to the relevant primary or secondary MCLs.

Table 22 summarizes the number of groundwater-quality sample results that exceeded a California primary or secondary drinking water standard (e.g. MCL) in spring 2023, organized by well beneficial use type (e.g. public supply, non-potable irrigation, or observation). The number of exceedances of water quality standards observed in Spring 2023 is similar to results in previous sampling events.

**Table 22. Summary of Exceedances of Water Quality Standard by COC and Well Type - Spring 2023**

COC	MCL Type	MCL (mg/L)	Number of Drinking Water Wells with Exceedance	Number of Non-Potable Water Wells with Exceedance <sup>(a)</sup>	Number of Observation Wells with Exceedance
TDS <sup>(b)</sup>	CA Secondary MCL – recommended limit	500	3	4	3
TDS <sup>(c)</sup>	CA Secondary MCL – upper limit	1,000	0	2	3
Sulfate	CA Secondary MCL	250	1	4	4
Chloride	CA Secondary MCL	250	0	1	1
Nitrate (as N)	CA Primary MCL	10	0	1	1
Fluoride	CA Primary MCL	2	0	0	0
Arsenic	CA Primary MCL	0.01	0	3	0

mgL = milligrams per liter

(a) non-potable wells are wells used for irrigation and/or “other” purposes. These wells are not used for drinking water (potable) supplies.

(b) Wells shown exceeding the CA Secondary MCL – lower limit are wells with TDS results greater than 500 mgL, but less than 1,000 mgL (less than the CA Secondary MCL – upper limit).

(c) Wells shown exceeding the CA Secondary MCL – upper limit are wells with TDS results greater than 1,000 mgL. This row does not include wells that exceeded the CA Secondary MCL – lower limit.

## Water Year 2023 Annual Report for the Borrego Springs Subbasin

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Figures 18 through 22 characterize groundwater quality in the North, Central, and South Management Areas for the five COCs. Each figure includes:

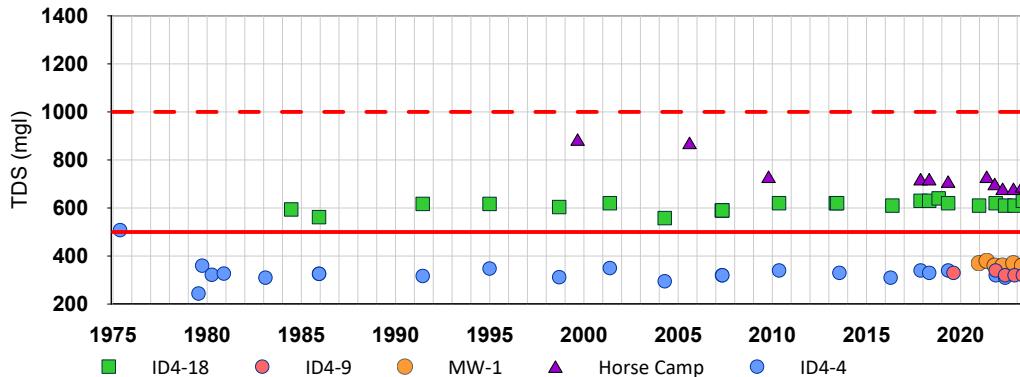
- A map that illustrates the spatial distribution of the COC concentrations at all wells sampled in spring 2023.
- Time-series charts of historical COC concentrations at selected wells in each of the Management Areas. The primary or secondary MCL are also plotted on each time-series chart.

Appendix G contains time history charts of the historical concentration of the five COCs identified in the GMP for each of the GMP Representative Monitoring Wells for the period of record from 1970 through 2023. The primary and/or secondary MCL for each COC is also plotted on each figure. The figures in Where known, the charts display the well depth and the well screen depth intervals.

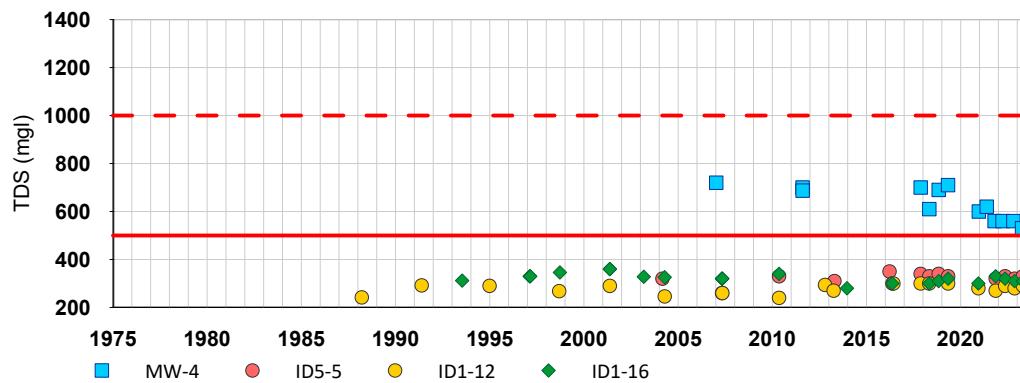
The following observations are made from these figures:

- Figure 18 shows that TDS concentrations are highest in the North and South Management Areas and in groundwater near the Borrego Sink. The “recommended” level for the California secondary MCL of 500 milligrams per liter (mg/L) was exceeded at 15 wells across the Basin. The “upper” level for the California secondary MCL of 1,000 mg/L was exceeded at five wells in the North and South Management Areas.
- Figure 19 shows that the highest concentrations of nitrate (as nitrogen) were measured in the North Management Area. The primary MCL of 10 mg/L was exceeded at two wells, neither of which is used for potable supply.
- Figure 20 shows that the highest concentrations of arsenic were measured in the South Management Area. The primary MCL of 10 micrograms per liter ( $\mu\text{g}/\text{L}$ ) was exceeded at three wells, all of which are non-potable irrigation wells.
- Figure 21 shows that the secondary MCL of 250 mg/L MCL for sulfate was exceeded in wells in nine wells. Most of these wells are in the North Management Area.
- Figure 22 shows that no wells exceeded the primary MCL of 2 mg/L for fluoride.

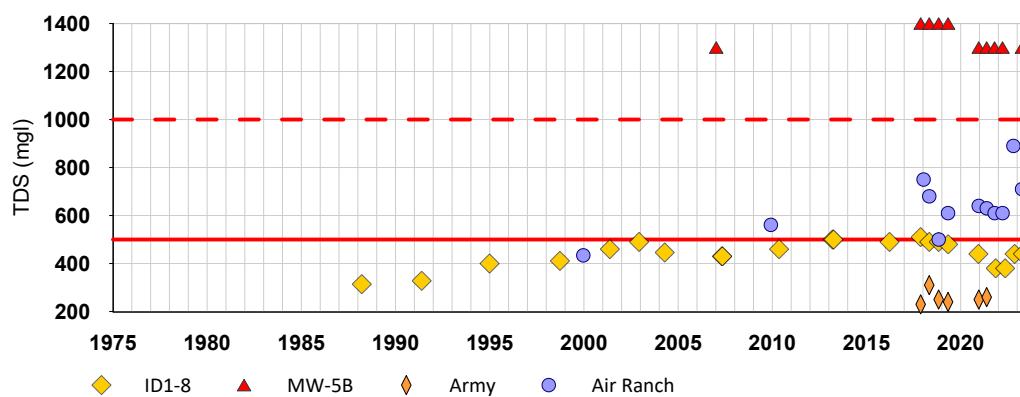
## North Management Area



## Central Management Area



## South Management Area

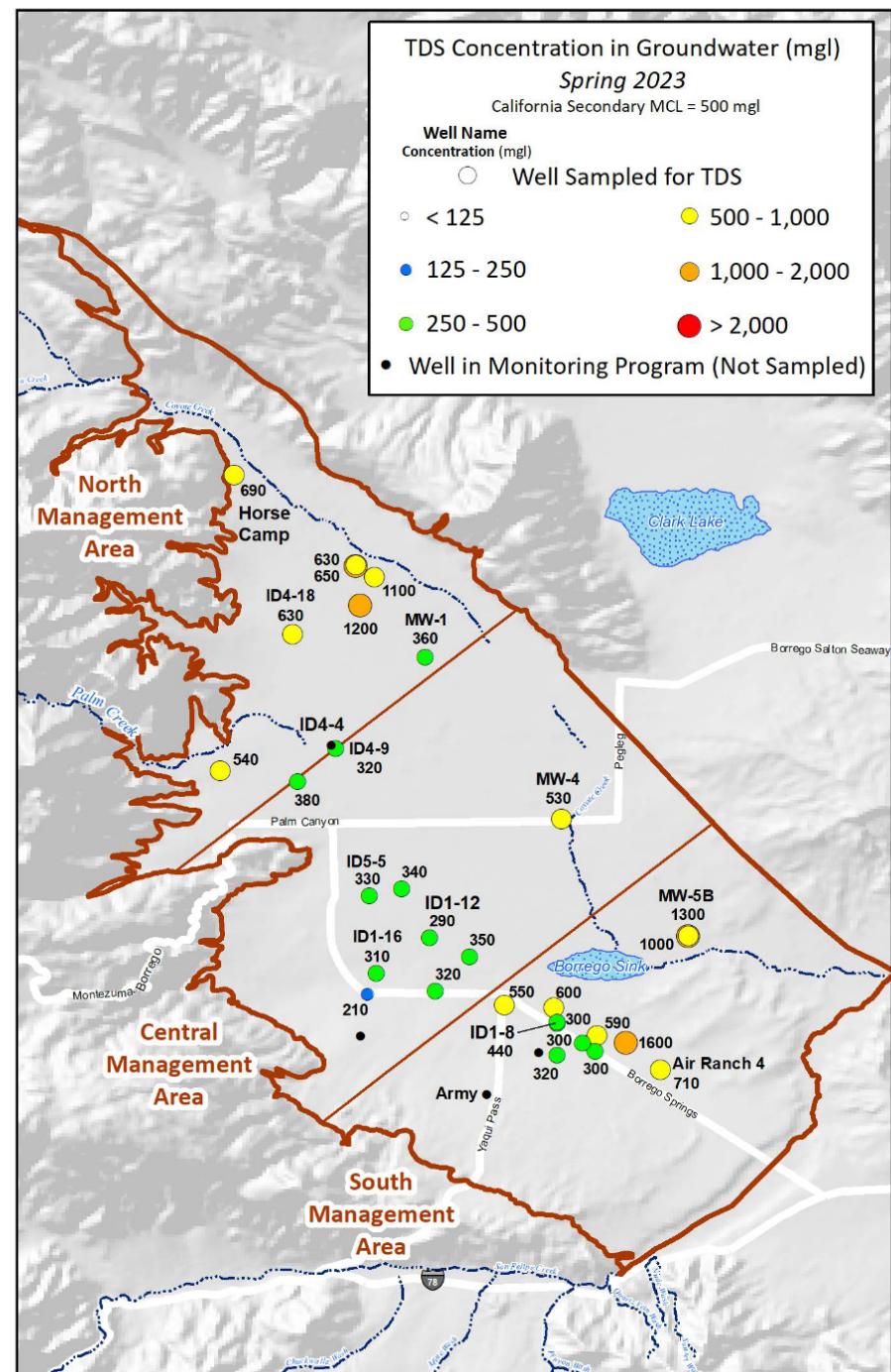


## TDS Concentration in Groundwater (mg/l)

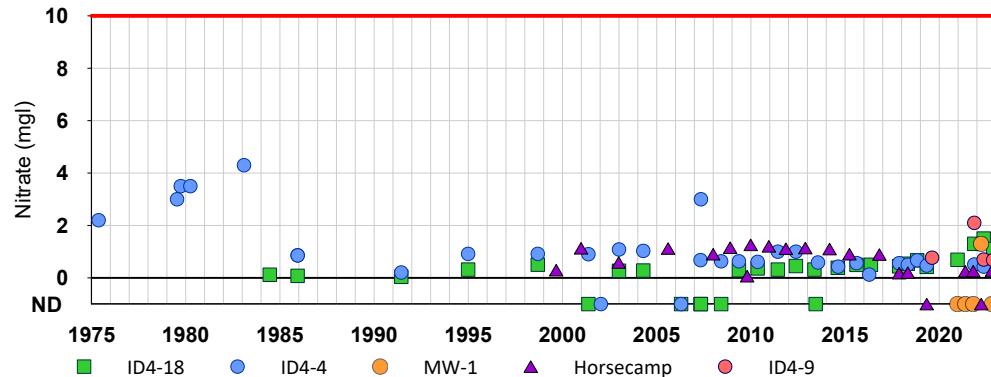
Spring 2023

California Secondary MCL = 500 mg/l

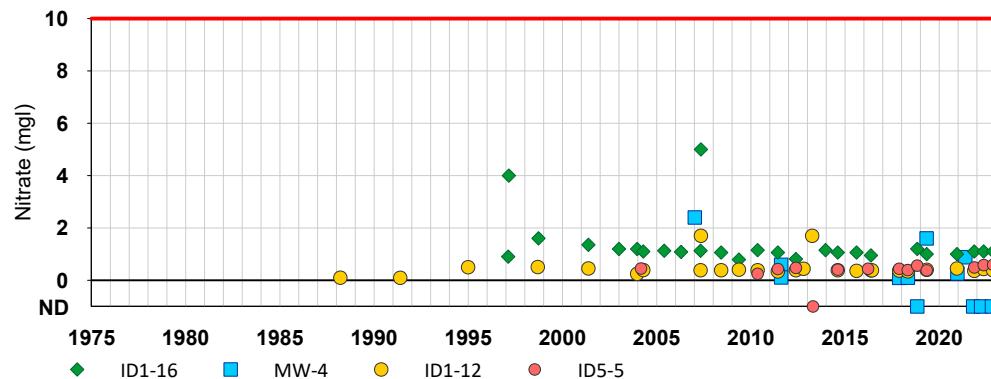
- Well Name
- Concentration (mg/l)
- Well Sampled for TDS
- < 125 (light green)
- 125 - 250 (medium green)
- 250 - 500 (dark green)
- > 2,000 (red)
- Well in Monitoring Program (Not Sampled)



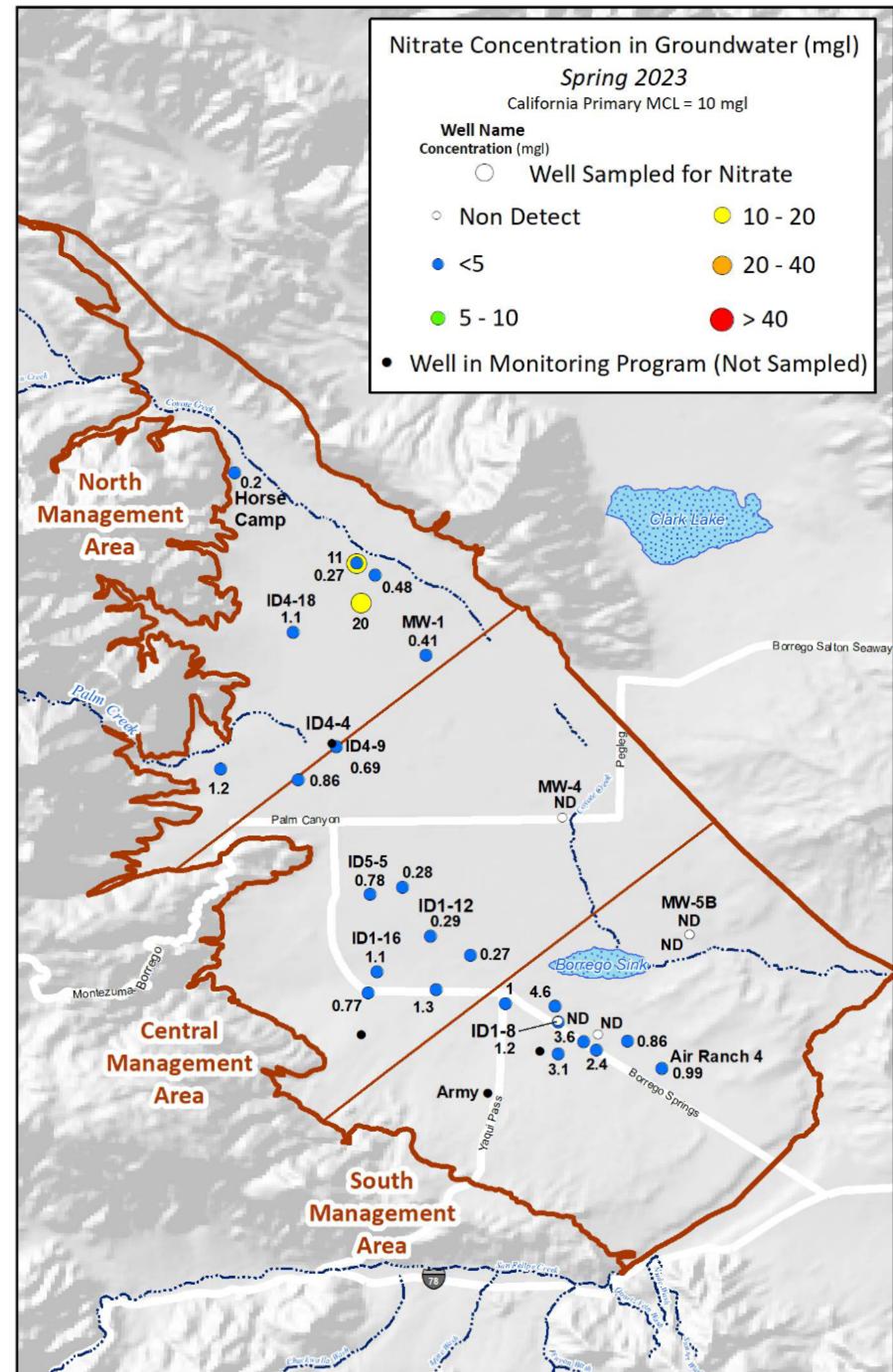
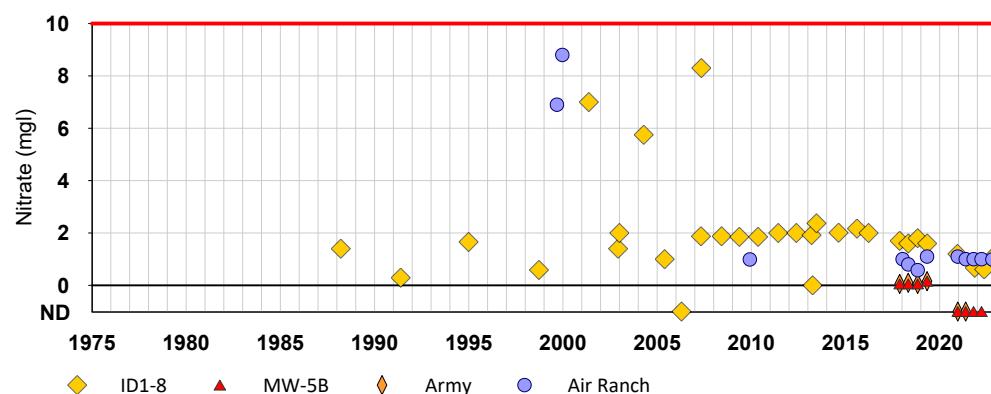
## North Management Area



## Central Management Area



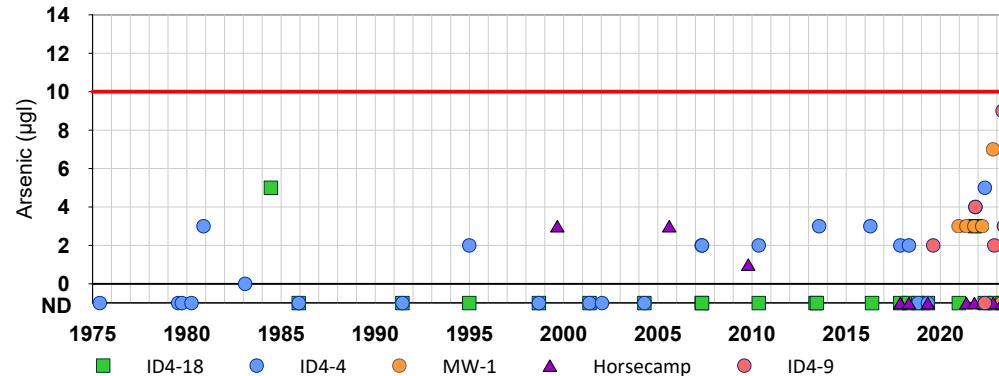
## **South Management Area**



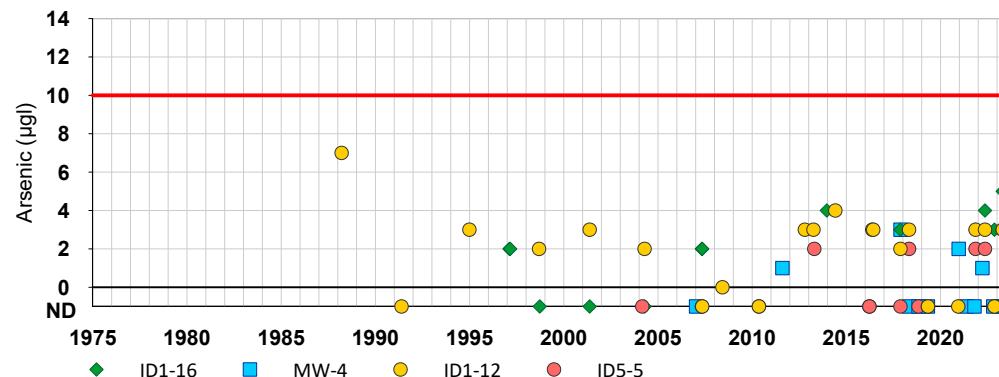
**Figure 19**

## Nitrate (as Nitrogen) in Groundwater

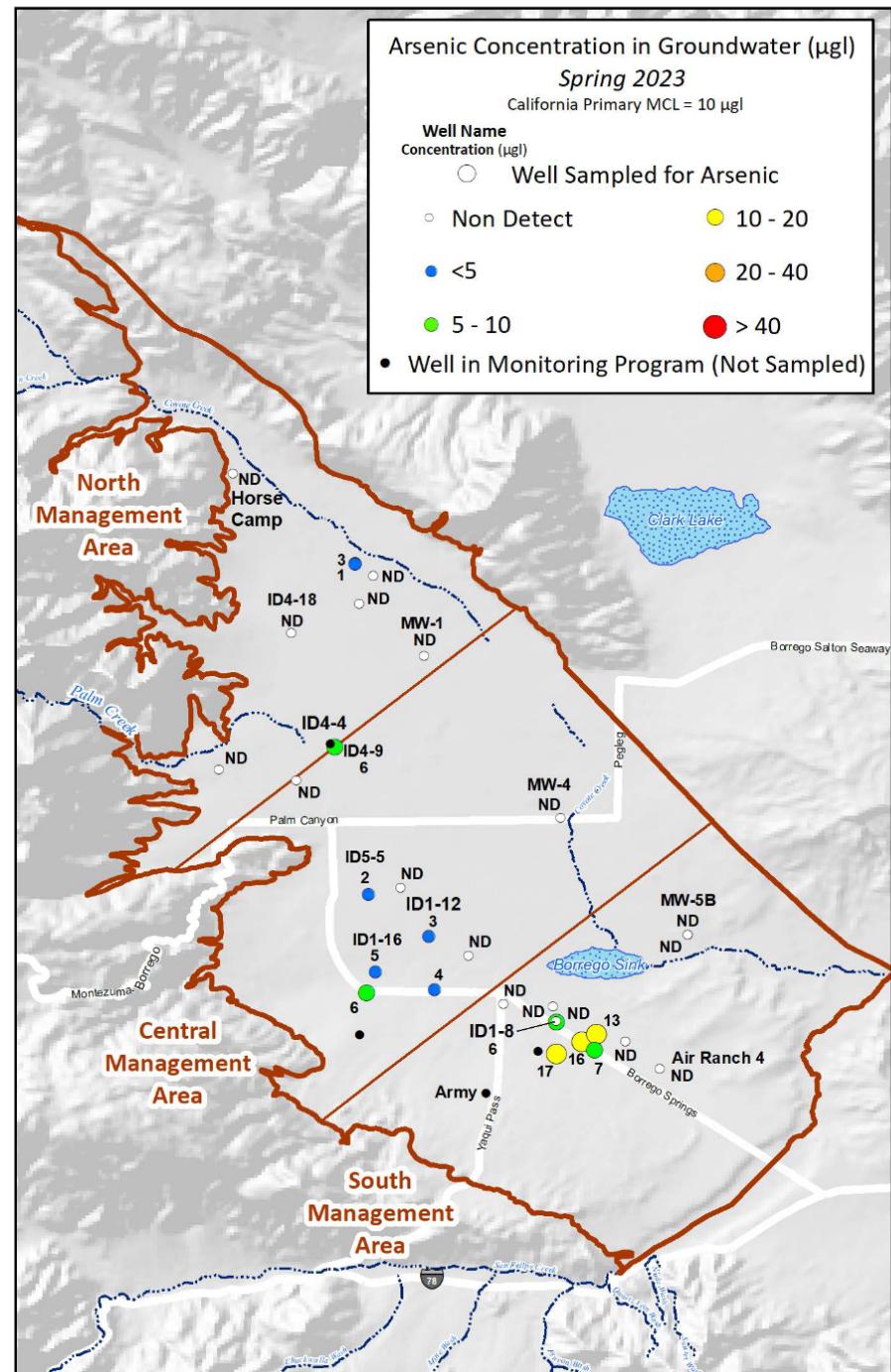
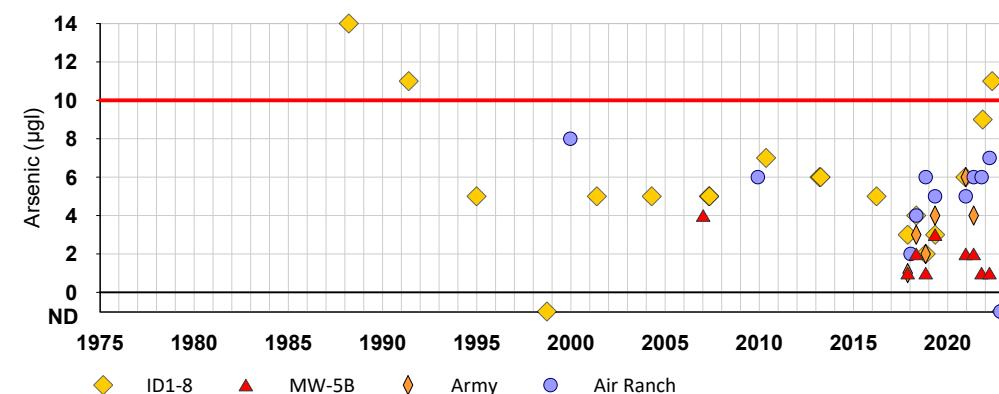
## North Management Area



## Central Management Area



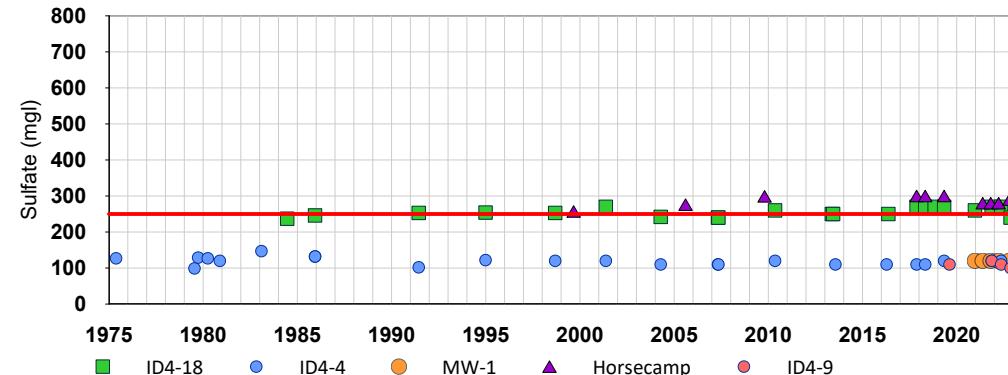
## **South Management Area**



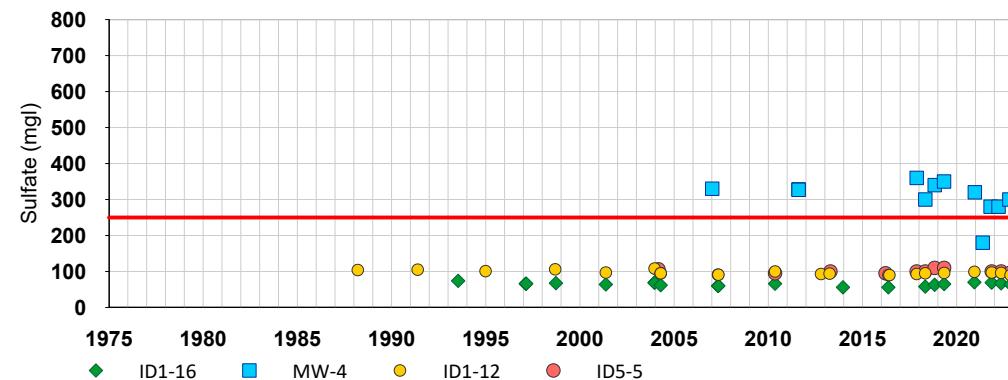
**Figure 20**

## Arsenic in Groundwater

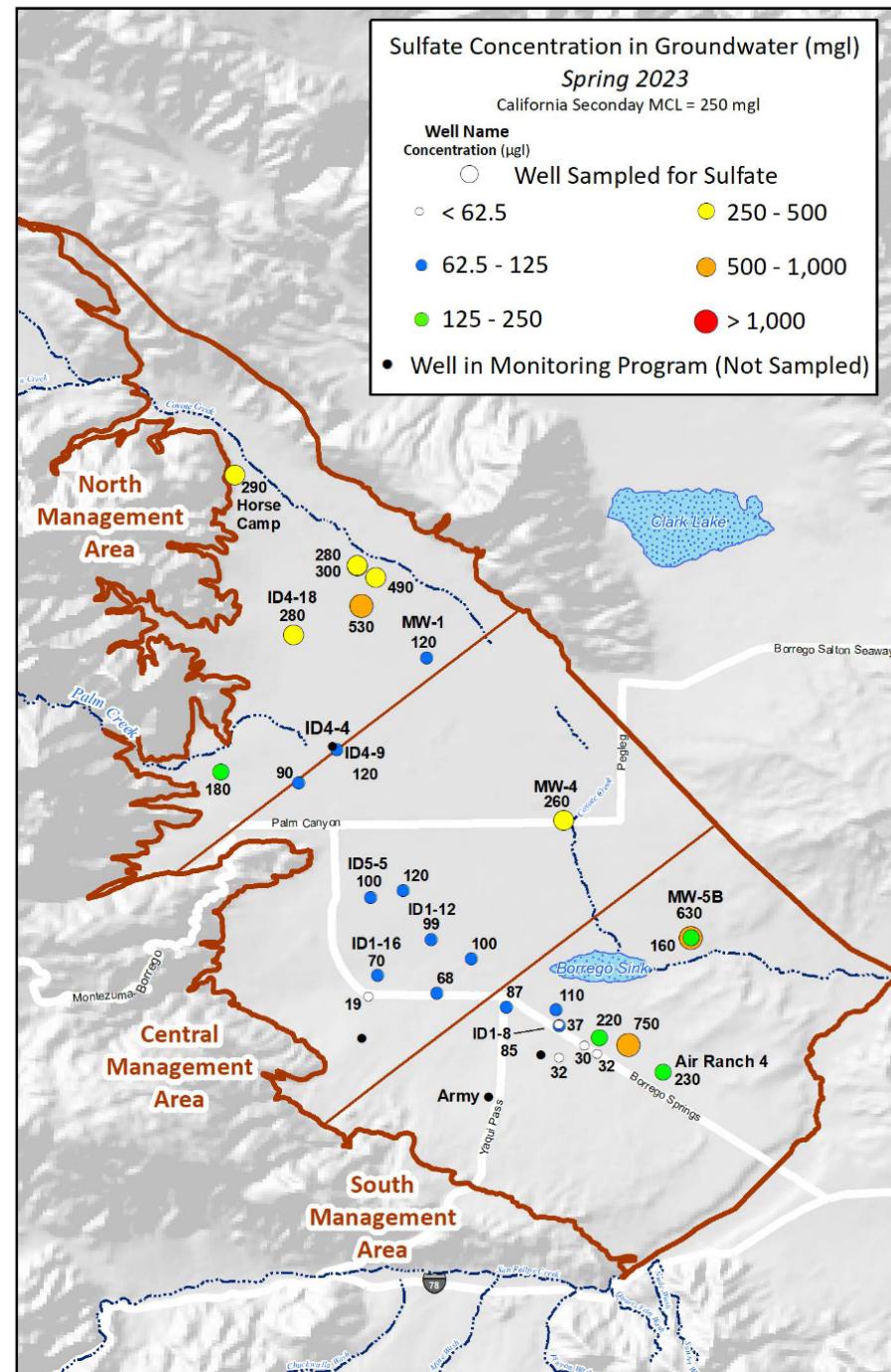
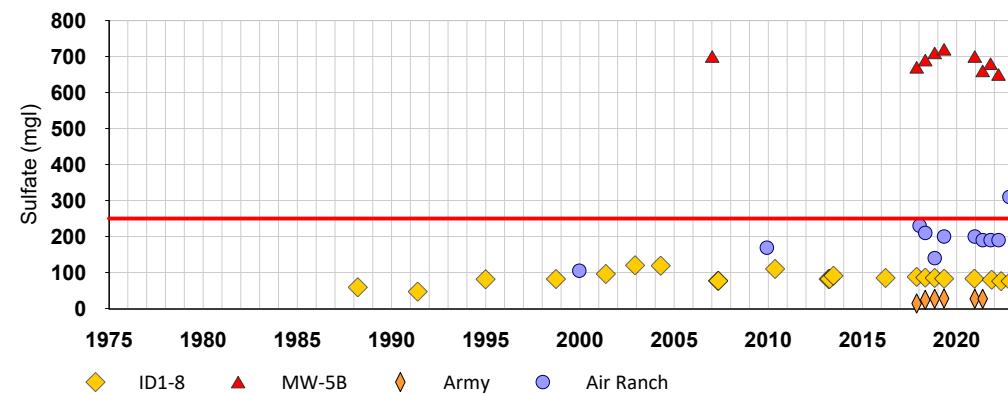
## North Management Area



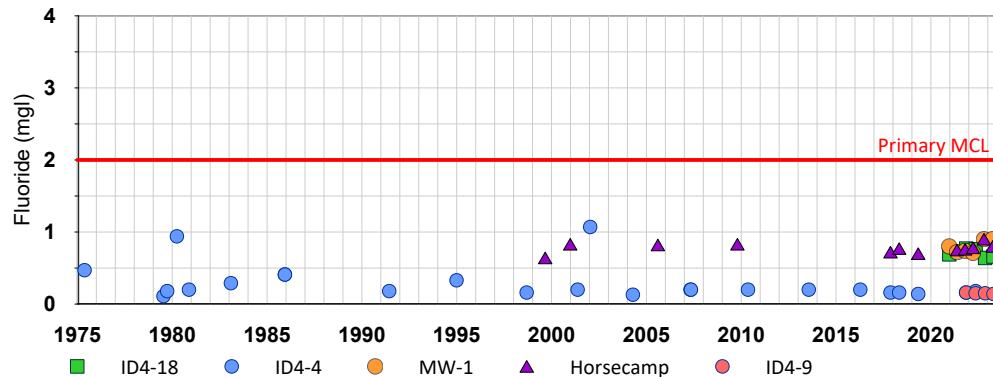
## Central Management Area



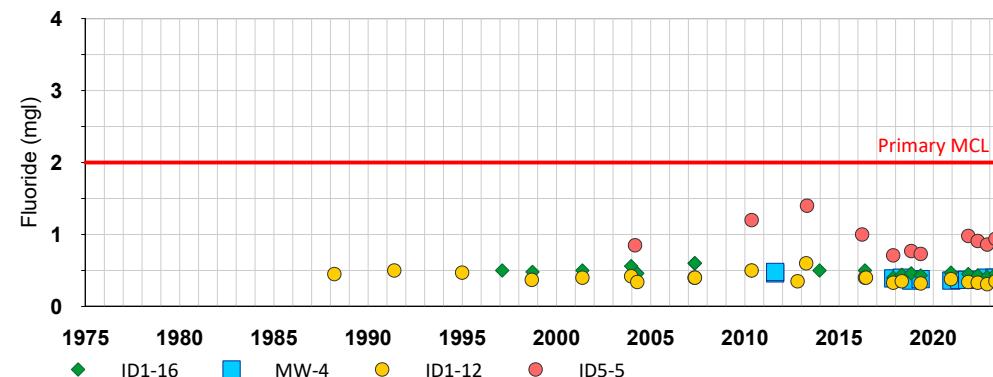
## South Management Area



## North Management Area



## Central Management Area



## **South Management Area**

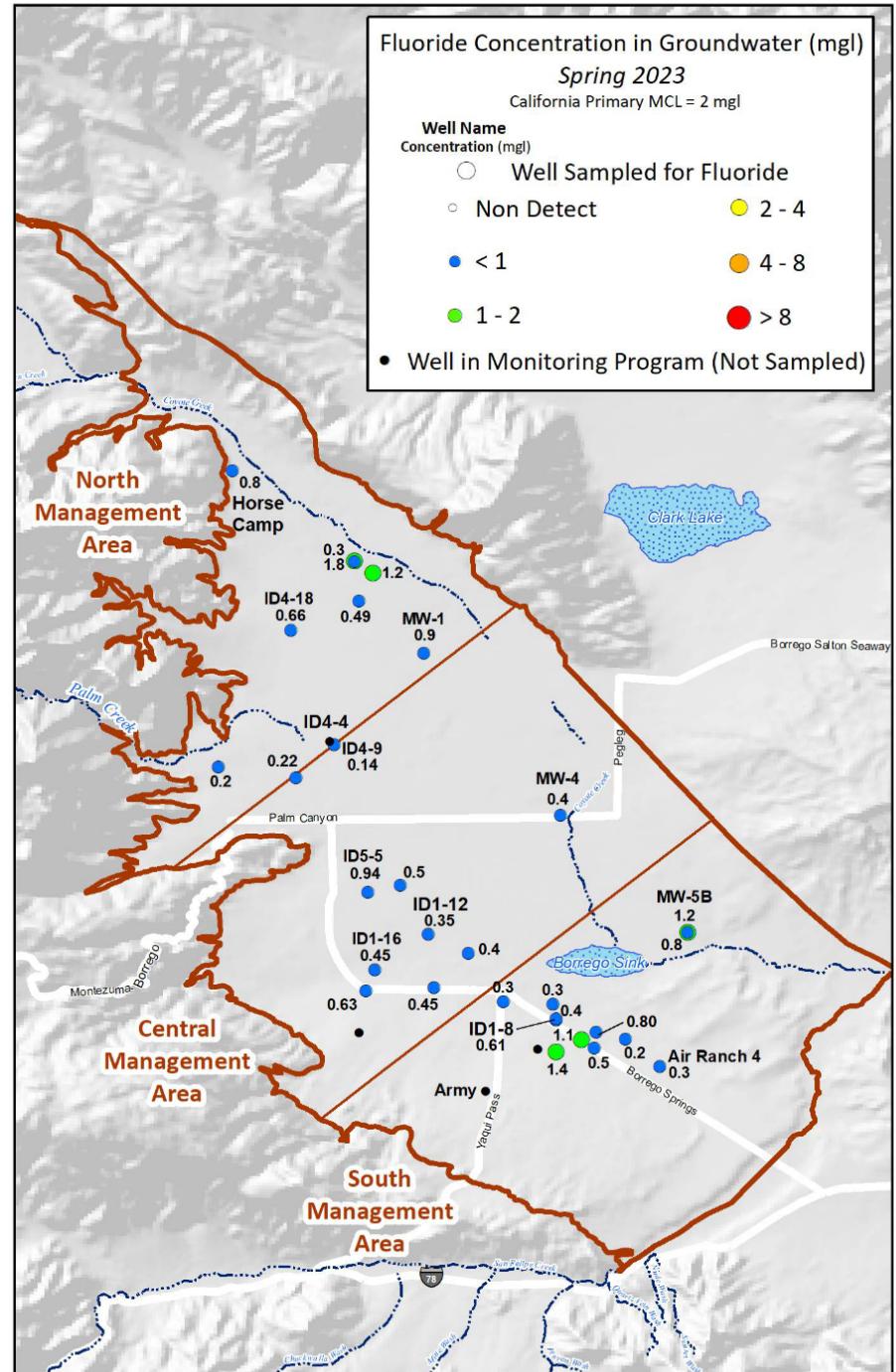
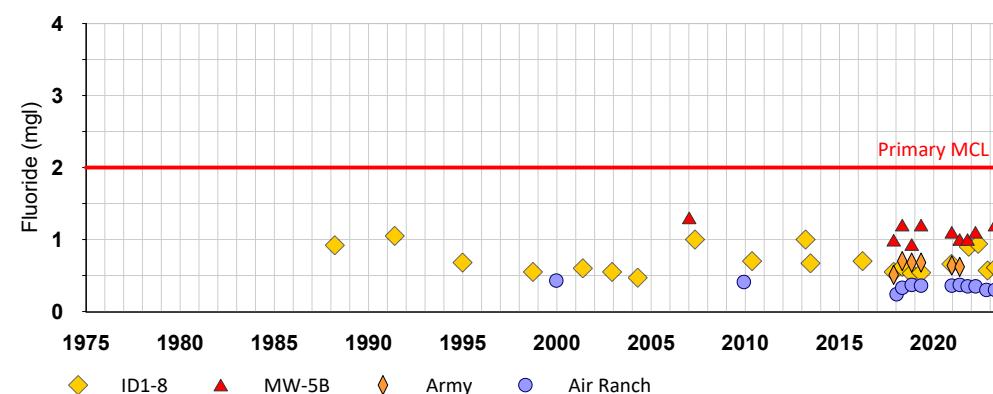


Figure 22

## Fluoride in Groundwater

## **6.0 SUMMARY OF PHYSICAL SOLUTION IMPLEMENTATION PROGRESS**

As described in Section 1, the entry of the Judgment prescribing a Physical Solution for the Basin represents the most important milestone in achieving groundwater sustainability within the Basin by 2040 and the Watermaster has made substantial progress in the initial years of implementation. The interim Watermaster was formed in March 2020, became the permanent Watermaster on April 8, 2021, and since inception has held 52 regular or special meetings of the Board during the reporting period to advance the implementation of the Judgment.

The following are some of the key milestones accomplished since the formation of the Watermaster through WY 2023:

- Administrative milestones:
  - Hired administrative and technical staff to support the implementation of the Judgment (April through August 2020)
  - Established a bank account and issued pumping assessments to fund the implementation of the Judgment (October to November 2020)
  - Established (November 2020) and maintained a website
  - Established the first Operating Budget in accordance with the Judgment for WY 2022 (July 2021) and set annual operating budgets each year thereafter
  - Convened a Technical Advisory Committee to support the development and implementation of the technical scope of work included in the Judgment (October 2020) and held 11 meetings since convening
  - Convened an Environmental Working Group (February 2021) to address specific environmental issues related to groundwater management in the Basin and held six meetings since convening
  - Completed water rights accounting for the first full WY (2021) of operations (November 2021) and have performed annual accounting each WY since
  - Established an application process in coordination with the County for the review and approval of (1) new De Minimis wells and (2) replacement of existing non-De Minimis wells (December 2021)
  - Submitted an application (February 2022) and were selected to receive funding from the DWR SGMA Implementation Grant (May 2022)
  - Held first in-person Board meeting (December 2022)
  - Held first Open House for interested stakeholders to improve communication of Watermaster activities and technical information (December 2022) and held one Open House since
- Groundwater metering milestones:
  - Published a list of approved meters (March 2020)
  - Approved protocols for meter verification and accuracy testing (August 2020)
  - Approved meter reading protocols for documenting manual meter reads (September 2020)

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- Conducted an initial WY 2020 meter read at 53 of 54 active wells operated by the Settling Parties (September 2020)
- Collected and cataloged meter verification for all 54 active wells operated by the Settling Parties (September to October 2020)
- Adopted additional meter reading protocols for the frequency of meter read data collection and QA/QC of telemetry meter reads (November 2020)
- Collected and cataloged meter verification information for most non-Settling Party wells (May to October 2021)
- Collected and reviewed monthly meter reads in WYs 2021, 2022, and WY 2023
- Collected and cataloged annual meter accuracy tests (WY 2021 through WY 2023)
- Approved Resolution 23-02 to establish a revised comprehensive metering program (March 2023)
- Achieved 98 percent compliance with the meter reading program as of the end of WY 2023 (98 percent of wells are metered)
- Groundwater pumping reduction (Rampdown) milestones:
  - Groundwater pumping decreased by 37 percent since the start of the GMP implementation (WY 2020) and by 20 percent relative to WY 2022
  - In WY 2023, total pumping of 10,430.38 af was approximately 50% less than the Annual Allocation of 20,694 af
- Groundwater level and quality monitoring milestones:
  - Performed the first semi-annual monitoring event (December 2020) and performed six semi-annual monitoring events since (through April 2023)
  - Approved the Groundwater Monitoring Plan for the Borrego Springs Subbasin to comply with the requirement to develop a WQMP within 24 months of entry of the Judgment (April 2023)
  - Collaborated with DWR on the design and construction of two new monitoring wells (MW-6S and MW-6D) that were added to the monitoring network. The wells were constructed by DWR in Spring 2023 and funded through the Technical Support Services program
  - As part of implementation of the Groundwater Monitoring Plan, Watermaster developed and implemented a public outreach effort to enhance the groundwater monitoring network and added one new well (T2 Farms Orchard well) in WY 2023 as a result of the efforts
- Analysis of Sustainable Yield milestones:
  - The TAC recommended, and the Watermaster Board approved, the technical scope of work and budget for activities related to the recalculation of Sustainable Yield (June 2021 and January 2023)
  - Completed the extension of the BVHM through WY 2021 and identified improvements to be made to the model to support the recalculation of Sustainable Yield (August 2022)

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- Completed the extension of the BVHM through WY 2022 and identified improvements to be made to the model to support the recalculation of Sustainable Yield (May 2023)
- EWG milestones:
  - The EWG recommended, and the Watermaster Board approved, the scope of work and budget for WY 2022 for developing work plans related to biological restoration of fallowed agricultural land and monitoring of GDEs (May 2021)
  - The EWG recommended, and the Watermaster Board approved, the scope of work and budget for studying methods for biological restoration of fallowed agricultural land (February 2022)
  - Began implementing the Biological Restoration of Fallowed Lands study with DWR grant funding (August 2022)
- Reporting milestones
  - Approved the 1st Annual Report of the Borrego Springs Groundwater Subbasin for WY 2019 for submittal to the DWR (March 2020)
  - Approved the Annual Report of the Borrego Springs Groundwater Subbasin for WY 2020 for submittal to the DWR (March 2021)
  - Submitted the updated GSP Alternative Elements Guide to DWR following entry of the Judgment by the Court (June 2021)
  - Approved the first expanded Annual Report of the Borrego Springs Groundwater Subbasin for WY 2021 for submittal to the Court pursuant to the Judgment and to DWR pursuant to SGMA (March 2022); and submitted one combined annual report since (WY 2022)

Additional information about all the activities of the Watermaster can be found on its website at [borregospringswatermaster.com](http://borregospringswatermaster.com).

## **7.0 REFERENCES**

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- West Yost. 2022a. [Start-Up Period and Water Year 2021 Annual Report for the Borrego Springs Subbasin](#). Prepared for the Borrego Springs Watermaster. March 2022.
- West Yost. 2022b. [Extension of the Borrego Valley Hydrologic Model through Water Year 2021](#). Prepared for the Borrego Springs Watermaster and Technical Advisory Committee. September 2022.
- West Yost. 2022c. [Methods to Estimate Annual Storage Change in Borrego Springs Subbasin](#). February 2022.
- West Yost 2021. [Water Year 2020 Annual Report for the Borrego Springs Subbasin](#). Prepared for the Borrego Springs Watermaster. April 2021.

## Appendix A

### Watermaster Board Motions - Water Year 2023

**Appendix A. Borrego Springs Watermaster Water Year 2023 Board Actions**

Meeting Date & Motion Number	Action	Motion Vote Count: approved-opposed-abstained
<b>October 13, 2022</b>		
Agenda Item I.D	Approve the Agenda	Motioned by Director Deichler Seconded by Vice Chair Smith Motion carried unanimously (5-0-0)
Agenda Item V.G	Record Watermaster Meetings, post to the Watermaster website, and retain the recordings for one-year	Motioned by Director Bennett Seconded by Director Deichler Motion carried unanimously (5-0-0)
Agenda Item II	Keep the same slate of Board Officers from WY 2022 in WY 2023	Motioned by Director Deichler Seconded by Director Bennett Motion carried unanimously (5-0-0)
Agenda Item IV.	Approve the Consent Calendar: Minutes from the September 8, 2022 Regular Board Meeting, September 2022 Financial Report, July and August 2022 Watermaster Staff Invoices, Transfer of Water Rights: (i) Permanent transfer of BPA from JM Roadrunner to Bilyk and (ii) Transfer of Carryover from T2 Borrego LLC to BSUSD	Motioned by Director Deichler Seconded by Director Bilyk Motion carried unanimously (5-0-0)
Agenda Item V.B	Submit a motion to the Court to permanently extend the Annual Report filing deadline to April 1st to coincide with the DWR reporting deadline	Motioned by Director Bennett Seconded by Director Deichler Motion carried by majority vote (3-2-0). Vice Chair Smith and Director Bilyk voted no.
Agenda Item V.C	Approve the \$8,425 cost to perform the financial audit and engage Lance, Soll & Lunghard, LLP to perform the work	Motioned by Vice Chair Smith Seconded by Director Deichler Motion carried unanimously (5-0-0)
Agenda Item V.D	Approve the agenda for the November 2, 2022 Technical Advisory Committee meeting	Motioned by Director Deichler Seconded by Vice Chair Smith Motion carried unanimously (5-0-0)

**Appendix A. Borrego Springs Watermaster Water Year 2023 Board Actions**

Meeting Date & Motion Number	Action	Motion Vote Count: approved-opposed-abstained
<b>November 10, 2022</b>		
Agenda Item I.D	Approve the Agenda	Motioned by Vice Chair Smith
		Seconded by Director Bilyk
		Motion carried unanimously (5-0-0)
Agenda Item III	Approve the Consent Calendar: Minutes from the October 13, 2022 Regular Board Meeting, October 2022 Financial Report, September 2022 Watermaster Staff Invoice, Transfer of Water Rights: (i) Transfer of Annual Allocation from Roadrunner Club to Springs RV and Golf, (ii) Transfer of Carryover from T2 Borrego LLC to Soli Organic, and (iii) Transfer of Carryover from T2 Borrego LLC to Gagini D. Weerasekera	Motioned by Director Deichler
		Seconded by Vice Chair Smith
		Motion carried unanimously (5-0-0)
Agenda Item IV.A	Approve the execution of the <i>Agreement for the Sustainable Groundwater Management Grant Program between Borrego Water District and Borrego Springs Watermaster</i> , pending a review of the final agreement by Legal Counsel to confirm no substantial changes have been made to the agreement	Motioned by Vice Chair Smith
		Seconded by Director Deichler
		Motion carried unanimously (5-0-0)
Agenda Item IV.B	Approve Amendment No. 6 to the Borrego Springs Watermaster Professional Services Agreement with West Yost	Motioned by Vice Chair Smith
		Seconded by Director Deichler
		Motion carried unanimously (5-0-0)
<b>November 15, 2022</b>		
	none	
<b>December 8, 2022</b>		
Agenda Item I.D	Approve the Agenda	Motioned by Vice Chair Smith
		Seconded by Director Bennett
		Motion carried unanimously (5-0-0)
Agenda Item III	Approve the Consent Calendar: Minutes from the November 10, 2022 Regular Board Meeting and November 15, 2022 Special Meeting, November 2022 Financial Report	Motioned by Vice Chair Smith
		Seconded by Director Bilyk
		Motion carried unanimously (5-0-0)

**Appendix A. Borrego Springs Watermaster Water Year 2023 Board Actions**

Meeting Date & Motion Number	Action	Motion Vote Count: approved-opposed-abstained
<b>January 12, 2023</b>		
Agenda Item I.D	Approve the Agenda	Motioned by Vice Chair Smith
		Seconded by Director Bilyk
		Motion carried unanimously (5-0-0)
Agenda Item III	Approve the Consent Calendar: Minutes from the December 8, 2022 Regular Board Meeting, December 2022 Financial Report, October 2022 Watermaster Staff Invoices (RWG and West Yost), November 2022 RWG Invoice	Motioned by Director Bilyk
		Seconded by Vice Chair Smith
		Motion carried unanimously (5-0-0)
Agenda Item IV.E	(1) Contract directly with Land IQ and Watermaster, assuming there are no financial implications for Land IQ to perform the work and (2) Include a statement in the contract that UCI will utilize separate principal scientists on the two grant-funded projects	Motioned by Director Bilyk
		Seconded by Vice Chair Smith
		Motion carried by majority vote (4-1-0). Director Jorgensen voted no.
Agenda Item IV.F	Approve the agendas for the next Technical Advisory Committee meeting and Environmental Working Group meetings	Motioned by Director Jorgensen
		Seconded by Director Bennett
		Motion carried unanimously (5-0-0)

**Appendix A. Borrego Springs Watermaster Water Year 2023 Board Actions**

Meeting Date & Motion Number	Action	Motion Vote Count: approved-opposed-abstained
<b>February 9, 2023</b>		
Agenda Item I.D	Approve the Agenda	Motioned by Director Jorgensen Seconded by Director Bilyk Motion carried unanimously (5-0-0)
Agenda Item III	Approve the Consent Calendar: Minutes from the January 12, 2023 Regular Board Meeting, January 2023 Financial Report, November 2022 West Yost Invoices, and December 2022 Watermaster Staff Invoices (RWG and West Yost)	Motioned by Director Bennett Seconded by Director Jorgensen Motion carried unanimously (5-0-0)
Agenda Item IV.B.1	Approve the TAC-recommended scope-of-work for the redetermination of the Sustainable Yield by 2025	Motioned by Director Bennett Seconded by Vice Chair Smith Motion carried unanimously (5-0-0)
Agenda Item IV.B.2	(1) approve Option 2 for repurposing the SGM grant funds to support the revised redetermination of the Sustainable Yield and establish the first of up to two budget amendments, and (2) request the TAC to perform a review of the streamflow monitoring station project in the SGM grant	Motioned by Vice Chair Smith Seconded by Director Jorgensen Motion carried unanimously (5-0-0)
Agenda Item IV.D	Approve the Assignment Agreement	Moved by Director Jorgensen Seconded by Director Bilyk Motion carried unanimously (5-0-0)
Agenda Item IV.F	Establish a standard practice of holding two in-person Board meetings annually	Moved by Vice Chair Smith Seconded by Director Jorgensen Motion carried unanimously (5-0-0)

**Appendix A. Borrego Springs Watermaster Water Year 2023 Board Actions**

Meeting Date & Motion Number	Action	Motion Vote Count: approved-opposed-abstained
<b>March 9, 2023</b>		
Agenda Item I.D	Approve the Agenda	Moved by Director Jorgensen Seconded by Vice Chair Smith Motion carried 4-0-0. Director Bilyk was absent.
Agenda Item III	Approve the Consent Calendar: Minutes from the February 9, 2023 Regular Board Meeting, February 2023 Financial Report	Moved by Director Bennett Seconded by Vice Chair Smith Motion carried 5-0-0
Agenda Item IV.A	Approve the <i>Water Year 2022 Financial Audit</i> by LSL and include it with the <i>Water Year 2022 Annual Report for the Borrego Springs Subbasin</i>	Moved by Vice Chair Smith Seconded by Director Jorgensen Motion carried 5-0-0
Agenda Item IV.B	Approve the <i>Water Year 2022 Annual Report for the Borrego Springs Subbasin</i> and file it with the Court and DWR after adding the signature of a California Professional Geologist	Moved by Director Bennett Seconded by Vice Chair Smith Motion carried 5-0-0
Agenda Item IV.E	Approve Resolution No. 23-01 to Establish Guidelines for the Technical Advisory Committee Process, with the noted edits	Moved by Director Bilyk Seconded by Director Jorgensen Motion carried 5-0-0
Agenda Item IV.F	Approve Resolution No. 23-02 Establishing a Revised Comprehensive Metering Program	Moved by Director Bilyk Seconded by Vice Chair Smith Motion carried 5-0-0

**Appendix A. Borrego Springs Watermaster Water Year 2023 Board Actions**

Meeting Date & Motion Number	Action	Motion Vote Count: approved-opposed-abstained
<b>April 6, 2023</b>		
Agenda Item I.D	Approve the Agenda	Moved by Director Bilyk Seconded by Director Dice Motion carried 5-0-0
Agenda Item III	Approve the Consent Calendar: Minutes from the March 9, 2023 Regular Board Meeting, January 2023 Watermaster Staff Invoices (RWG and West Yost)	Moved by Director Bennett Seconded by Director Jorgensen Motion carried 5-0-0
Agenda Item IV.A	Approve the <i>Groundwater Monitoring Plan for the Borrego Springs Subbasin</i> with the three noted edits	Moved by Director Bilyk Seconded by Director Bennett Motion carried 5-0-0
Agenda Item IV.B	Approve the amendment to the WY 2023 Budget a due date of August 31, 2023 for the supplemental Pumping Assessment	Moved by Director Jorgensen Seconded by Director Bilyk Motion carried 5-0-0
Agenda Item IV.C	Renew the Watermaster insurance policy for WY 2023	Moved by Director Bilyk Seconded by Alternate Director Dice Motion carried 5-0-0
<b>April 17, 2023</b>		
Agenda Item III.A	To contract up to \$3,000 with Tom Dodson & Associates to perform the required CEQA services	Moved by Director Jorgensen Seconded by Director Bennett Motion carried 5-0-0

**Appendix A. Borrego Springs Watermaster Water Year 2023 Board Actions**

Meeting Date & Motion Number	Action	Motion Vote Count: approved-opposed-abstained
<b>May 11, 2023</b>		
Agenda Item I.D	Approve the Agenda	Moved by Director Bilyk Seconded by Director Jorgensen Motion carried 5-0-0
Agenda Item III	Approve the Consent Calendar: Minutes from the April 6, 2023 Regular Board Meeting, minutes from the April 17, 2023 Special Board Meeting, April 2023 Financial Report	Moved by Vice Chair Smith Seconded by Director Bilyk Motion carried 5-0-0
Agenda Item IV.D.i	Approve the staff recommended agenda with the addition of the UCI groundwater sampling request	Moved by Vice Chair Smith Seconded by Director Bilyk Motion failed roll-call vote 2-3-0. Chair Duncan and Directors Jorgensen and Bennett voted no.
Agenda Item IV.D.ii	Approve the TAC meeting agenda included in the Board package	Moved by Director Jorgensen Seconded by Director Bennett Motion carried 5-0-0
Agenda Item IV.E.i	Adopt the recommended Agenda setting process with the inclusion of a requirement to have two out of five Board members vote in favor of an item for it to be added to the agenda	Moved by Director Jorgensen Seconded by Chair Duncan Motion failed by roll-call vote 2-3-0. Vice Chair Smith and Directors Bennett and Bilyk voted no.
Agenda Item IV.E.ii	Adopt the recommended Agenda setting process with a requirement to have a standard majority vote (three out of five Board members) in favor of agendizing an item(s) for the subsequent Board meeting	Moved by Vice Chair Smith Seconded by Director Bilyk Motion carried 4-1-0. Director Jorgensen voted no.
Agenda Item IV.E.iii	Approve the June 14, 2023 agenda with the additional requested items	Moved by Chair Duncan Seconded by Director Jorgensen Motion carried 5-0-0

**Appendix A. Borrego Springs Watermaster Water Year 2023 Board Actions**

Meeting Date & Motion Number	Action	Motion Vote Count: approved-opposed-abstained
<b>June 14, 2023</b>		
Agenda Item I.D	Approve the Agenda	Moved by Director Bilyk Seconded by Director Jorgensen Motion carried 5-0-0
Agenda Item III	Approve the Consent Calendar: Minutes from the May 11, 2023 Regular Board Meeting, May 2023 Financial Report; February 2023 Staff Invoices (RWG and West Yost); March 2023 Staff Invoices (RWG and West Yost); Grant Reimbursement Request Report	Moved by Vice Chair Smith Seconded by Director Bilyk Motion carried 5-0-0
Agenda Item V.A	Cooperate with UCI's request for Watermaster assistance with groundwater quality sampling and to get permission from well owners prior to sampling	Moved by Director Jorgensen Seconded by Director Bennett Motion carried 4-1-0. Director Bilyk voted no.
Agenda Item V.B	Approve the WY 2024 Budget as presented by staff	Moved by Vice Chair Smith Seconded by Director Jorgensen Motion carried 5-0-0
Agenda Item V.II.i	Add an agenda item for Board discussion on third-party requests for the utilization of Watermaster resources	Moved by Director Bilyk Seconded by Vice Chair Smith Motion carried 5-0-0
Agenda Item V.II.ii	Add an agenda item for the discussion on the duties of a GSA defined in SGMA Water Code sections to a future agenda, directing Mr. Markman to make a comparison of the code to the Judgment	Moved by Vice Chair Smith Seconded by Chair Duncan Motion carried 5-0-0
Agenda Item V.II.ii	Approve the July 13, 2023 agenda presented	Moved by Director Bilyk Seconded by Vice Chair Smith Motion carried 5-0-0

**Appendix A. Borrego Springs Watermaster Water Year 2023 Board Actions**

Meeting Date & Motion Number	Action	Motion Vote Count: approved-opposed-abstained
<b>July 13, 2023</b>		
Agenda Item I.D	Approve the Agenda with the recommended modification <i>[to move the Closed Session (Item VII) to follow the Consent Calendar]</i>	Moved by Director Bilyk Seconded by Director Bennett Motion carried 5-0-0
Agenda Item III	Approve the Consent Calendar with the discussed changes to the meeting minutes: Minutes from the June 14, 2023 Regular Board Meeting, June 2023 Financial Report	Moved by Vice Chair Smith Seconded by Director Bilyk Motion carried 5-0-0
Agenda Item IV.B	Approve the EWG meeting agenda included in the Board package	Moved by Director Jorgensen Seconded by Director Bennett Motion carried 5-0-0
Agenda Item IV.C	Approve the TAC meeting agenda included in the Board package	Moved by Director Jorgensen Seconded by Director Bilyk Motion carried 5-0-0
Agenda Item VII.i	Cancel the August 10, 2023 Board meeting	Moved by Director Jorgensen Seconded by Director Bilyk Motion carried 5-0-0
Agenda Item VII.ii	Approve the agenda for the September 14, 2023 Board meeting as presented	Moved by Vice Chair Smith Seconded by Director Bilyk Motion carried 5-0-0

**Appendix A. Borrego Springs Watermaster Water Year 2023 Board Actions**

Meeting Date & Motion Number	Action	Motion Vote Count: approved-opposed-abstained
<b>September 14, 2023</b>		
Agenda Item I.D	Approve the Agenda	Moved by Director Jorgensen
		Seconded by Vice Chair Smith
		Motion carried 5-0-0
Agenda Item III	Approve the Consent Calendar: Minutes from the July 11, 2023 Regular Board Meeting, July 2023 Financial Report, August 2023 Financial Report, April 2023 Watermaster Staff Invoices, May 2023 Watermaster Staff Invoices, June 2023 Watermaster Staff Invoices, 2023 Q2 Grant Reimbursement Request Report, Permanent transfer of BPA rights between W. Bauer and BWD	Moved by Vice Chair Smith
		Seconded by Director Jorgensen
		Motion carried 5-0-0
Agenda Item IV.A	Approve Statement of Work No. 6 and Contract Amendment No. 8 for West Yost Administrative and Technical Services in WY 2024 and redact the statement that the "Subconsultant will be billed at actual cost plus 10%".	Moved by Vice Chair Smith
		Seconded by Director Bilyk
		Motion carried 5-0-0
Agenda Item IV.C	Approve the WY 2024 Board meeting dates on the condition that the November 2023 Board Meeting and Open House are scheduled within the next week	Moved by Director Bennett
		Seconded by Director Jorgensen
		Motion carried 5-0-0
Agenda Item IV.D	File a motion with the Court to amend the Judgment to allow a community representative on the TAC	Moved by Director Jorgensen
		Seconded by Director Bennett
		Motion carried 5-0-0
Agenda Item IV.E	Continue as planned to begin work on the five-year update of the GMP on October 1, 2023	Moved by Director Bennett
		Seconded by Vice Chair Smith
		Motion carried 5-0-0

## Appendix B

### Water Year 2023 Financial Audit

**Borrego Springs Watermaster**

**Management Report**

**September 30, 2023**



**C.J. Brown & Company CPAs**  
An Accountancy Corporation

**Borrego Springs Watermaster**

**Management Report**

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# C.J. Brown & Company CPAs

## An Accountancy Corporation

Christopher J. Brown, CPA, CGMA  
Jonathan Abadesco, CPA  
Jeffrey Palmer

**Cypress Office:**  
10805 Holder Street, Suite 150  
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5051 Canyon Crest Drive, Suite 203  
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(657) 214-2307

### **CONFIDENTIAL**

Board of Directors  
Borrego Springs Watermaster  
Borrego Springs, California

#### **Dear Members of the Board:**

In planning and performing our audit of the financial statements of the Borrego Springs Watermaster (Watermaster) as of and for the year ended September 30, 2023, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States, we considered the Watermaster's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we do not express an opinion on the effectiveness of the Watermaster's internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A reasonable possibility exists when the likelihood of an event occurring is either reasonably possible or probable as defined as follows:

- *Reasonably possible.* The chance of the future event or events occurring is more than remote but less than likely.
- *Probable.* The future event or events are likely to occur.

Our consideration of internal control was for the limited purpose described in the first paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses. Given these limitations, during our audit we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

\* \* \* \* \*

This communication is intended solely for the information and use of management, the Board of Directors, and others within the Watermaster, and is not intended to be, and should not be, used by anyone other than these specified parties. This restriction is not intended to limit the distribution of this letter, which is a matter of public record.

We appreciate the courtesy and cooperation extended to us during our examination. We would be pleased to discuss the contents of this letter with you at your convenience. Please do not hesitate to contact us.

*C.J. Brown & Company, CPAs*

C.J. Brown & Company, CPAs  
Cypress, California  
March 14, 2024

## **APPENDIX**

**Borrego Springs Watermaster**

**Audit/Finance Committee Letter**

**September 30, 2023**



# C.J. Brown & Company CPAs

An Accountancy Corporation

Christopher J. Brown, CPA, CGMA  
Jonathan Abadesco, CPA  
Jeffrey Palmer

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10805 Holder Street, Suite 150  
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Board of Directors  
Borrego Springs Watermaster  
Borrego Springs, California

We have audited the financial statements of the Borrego Springs Watermaster (Watermaster) for the year ended September 30, 2023, and have issued our report thereon dated March 14, 2024.

## **Our Responsibility in Relation to the Financial Statement Audit**

As communicated in our engagement letter dated October 31, 2023, our responsibility, as described by professional standards, is to form and express an opinion about whether the financial statements that have been prepared by management with your oversight are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America. Our audit of the financial statements does not relieve you or management of your respective responsibilities.

Our responsibility, as prescribed by professional standards, is to plan and perform our audit to obtain reasonable, rather than absolute, assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control over financial reporting. Accordingly, as part of our audit, we considered the internal control of the Watermaster solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control.

We are also responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures for the purpose of identifying other matters to communicate to you.

If any, we have provided our findings regarding significant control deficiencies over financial reporting and material noncompliance, and other matters noted during our audit in a separate letter to you dated March 14, 2024.

## **Planned Scope and Timing of the Audit**

We conducted our audit consistent with the planned scope and timing we previously communicated to you.

## **Compliance with All Ethics Requirements Regarding Independence**

The engagement team, others in our firm, as appropriate, our firm, and our network firms have complied with all relevant ethical requirements regarding independence.

An auditor that is not involved in the engagement performed an independent review of the financial statements that was prepared by us based on the information provided by management. This safeguard reduces the threat of self-review risk to an acceptable level.

## **Required Risk Assessment Procedures per Auditing Standards**

As auditors of the Watermaster, we are required per AU-C Section 240, “Consideration of Fraud in a Financial Statement Audit”, to “ordinarily” presume and consider the following risks in designing our audit procedures:

- Management override of controls
- Revenue recognition

## **Qualitative Aspects of the Entity’s Significant Accounting Practices**

### *Significant Accounting Policies*

Management has the responsibility to select and use appropriate accounting policies. A summary of the significant accounting policies adopted by the Watermaster is included in Note 1 to the financial statements. There have been no initial selection of accounting policies and no other changes in significant accounting policies or their application during 2023. No other matters have come to our attention that would require us, under professional standards, to inform you about (1) the methods used to account for significant unusual transactions and (2) the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.

### *Significant Accounting Estimates*

Accounting estimates are an integral part of the financial statements prepared by management and are based on management’s current judgments. Those judgments are normally based on knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ markedly from management’s current judgments. The most sensitive accounting estimates affecting the financial statements are as follows:

Management’s estimate of the fair value of cash and investments is based on information provided by financial institutions. We evaluated the key factors and assumptions used to develop the fair value of cash and investments in determining that it is reasonable in relation to the financial statements taken as a whole.

### *Financial Statement Disclosures*

Certain financial statement disclosures involve significant judgment and are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the Watermaster’s financial statements relate to:

The disclosure of fair value of cash and cash equivalents in Note 2 to the basic financial statements represents amounts susceptible to market fluctuations.

## **Significant Unusual Transactions**

For purposes of this communication, professional standards require us to communicate to you significant unusual transactions identified during our audit. No significant unusual transactions were identified as a result of our audit procedures that were brought to the attention of management:

## **Identified or Suspected Fraud**

We have not identified or have not obtained information that indicates that fraud may have occurred.

## **Significant Difficulties Encountered during the Audit**

We encountered no significant difficulties in dealing with management relating to the performance of the audit.

### **Uncorrected and Corrected Misstatements**

For purposes of this communication, professional standards also require us to accumulate all known and likely misstatements identified during the audit, other than those that we believe are trivial, and communicate them to the appropriate level of management. Further, professional standards require us to also communicate the effect of uncorrected misstatements related to prior periods on the relevant classes of transactions, account balances or disclosures, and the financial statements as a whole and each applicable opinion unit. There were no uncorrected misstatements whose effects in the current and prior periods, as determined by management, are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.

### **Disagreements with Management**

For purposes of this letter, professional standards define a disagreement with management as a matter, whether or not resolved to our satisfaction, concerning a financial accounting, reporting, or auditing matter, which could be significant to the Watermaster's financial statements or the auditor's report. No such disagreements arose during the course of the audit.

### **Circumstances that Affect the Form and Content of the Auditor's Report**

For purposes of this letter, professional standards require that we communicate any circumstances that affect the form and content of our auditor's report. There were no circumstances that affect the form and content of the auditor's report.

### **Representations Requested from Management**

We have requested certain written representations from management, which are included in the attached letter dated March 14, 2024.

### **Management's Consultations with Other Accountants**

In some cases, management may decide to consult with other accountants about auditing and accounting matters. Management informed us that, and to our knowledge, there were no consultations with other accountants regarding auditing and accounting matters.

### **Other Significant Matters, Findings, or Issues**

In the normal course of our professional association with the Watermaster, we generally discuss a variety of matters, including the application of accounting principles and auditing standards, significant events or transactions that occurred during the year, operating and regulatory conditions affecting the entity, and operational plans and strategies that may affect the risks of material misstatement. None of the matters discussed resulted in a condition to our retention as the Watermaster's auditors.

### **Conclusion**

We appreciate the cooperation extended to us by the West Yost Team: Samantha Adams, Executive Director, Leah Ehresman, Controller, and Maria Mendoza-Tellez, Project Accountant III, in the performance of our audit testwork.

We will be pleased to respond to any question you have about the foregoing. We appreciate the opportunity to continue to be of service to the Watermaster.

*C.J. Brown & Company, CPAs*

**C.J. Brown & Company, CPAs**

Cypress, California

March 14, 2024

**Borrego Springs Watermaster**  
**Annual Financial Report**  
**For the Fiscal Year Ended September 30, 2023**



**Borrego Springs, California**

# Our Mission Statement

*"To manage groundwater resources of the Borrego Springs Subbasin in accordance with the April 8, 2021 judgment"*

## Board of Directors as of September 30, 2023

Name	Title	Elected/ Appointed	Current Term
Dave Duncan	Chair	Appointed	Ongoing
Shannon Smith	Vice-Chair	Appointed	Ongoing
Mark Jorgensen	Director	Appointed	Ongoing
Tyler Bilyk	Director	Appointed	Ongoing
Jim Bennett	Director	Appointed	Ongoing

**Borrego Springs Watermaster  
23692 Birtcher Drive  
Lake Forest, California 92630  
[www.borregospringswatermaster.com](http://www.borregospringswatermaster.com)**

**Borrego Springs Watermaster**

**Annual Financial Report**

**For the Year Ended September 30, 2023**

**Borrego Springs Watermaster  
Annual Financial Report  
For the Year Ended September 30, 2023**

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## **Financial Section**





# C.J. Brown & Company CPAs

An Accountancy Corporation

Christopher J. Brown, CPA, CGMA  
Jonathan Abadesco, CPA  
Jeffrey Palmer

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## Independent Auditor's Report

Board of Directors  
Borrego Springs Watermaster  
Borrego Springs, California

### ***Report on the Financial Statements***

We have audited the accompanying financial statements of the Borrego Springs Watermaster (Watermaster), which comprises the statement of net position as of September 30, 2023, and the related statement of revenues, expenses, and changes in net position for the year then ended, and the related notes to the financial statements, which collectively comprise the Watermaster's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Borrego Springs Watermaster as of September 30, 2023, and the respective changes in net position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Basis for Opinions***

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and the State Controller's Minimum Audit Requirements for California Special Districts. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Watermaster, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

### ***Responsibilities of Management for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Watermaster's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

## **Independent Auditor's Report, continued**

### ***Auditor's Responsibilities for the Audit of the Financial Statements***

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- exercise professional judgment and maintain professional skepticism throughout the audit.
- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Watermaster's internal control. Accordingly, no such opinion is expressed.
- evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Watermaster's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 4 through 6, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

## **Independent Auditor's Report, continued**

### ***Report on Summarized Comparative Information***

The summarized comparative information presented herein as of and for the fiscal year ended September 30, 2022, derived from those prior auditor's financial statements, has not been audited, reviewed, or compiled, and, accordingly, we express no opinion on it.

### ***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated March 14, 2024, on our consideration of the Watermaster's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Watermaster's internal control over financial reporting and compliance. This report can be found on pages 18 and 19.

*C.J. Brown & Company, CPAs*

**C.J. Brown & Company, CPAs**

Cypress, California

March 14, 2024

**Borrego Springs Watermaster**  
*Management's Discussion and Analysis*  
**For the Year Ended September 30, 2023**

The following Management's Discussion and Analysis (MD&A) of activities and financial performance of the Borrego Springs Watermaster (Watermaster) provides an introduction to the financial statements of the Watermaster for the year ended September 30, 2023 (with summarized comparative information for fiscal year ended September 30, 2022). We encourage readers to consider the information presented here with additional information that we have furnished in the accompanying basic financial statements and related notes, which follow this section.

## **2023 Financial Highlights**

- In 2023, the Watermaster's net position increased 113% or \$560,273 to \$1,055,709.
- In 2023, the Watermaster's total revenues increased 171% or \$973,353 to \$1,541,949.
- In 2023, the Watermaster's total expenses increased 21% or \$170,449 to \$981,676.

## **Using This Financial Report**

This annual report consists of a series of financial statements. The Statements of Net Position, Statements of Revenues, Expenses, and Changes in Net Position, and Statements of Cash Flows provide information about the activities and performance of the Watermaster using accounting methods similar to those used by private sector companies.

The Statements of Net Position include all of the Watermaster's investments in resources (assets), and obligations to creditors (liabilities). They also provide the basis for evaluating the results of operations, evaluating the capital structure of the Watermaster, and assessing the liquidity and financial flexibility of the Watermaster. All of the current year's revenues and expenses are accounted for in the Statements of Revenues, Expenses, and Changes in Net Position. These statements measure the success of the Watermaster's operations over the past year and can be used to determine if the Watermaster has successfully recovered all of its costs through its rates and other charges. In addition to tracking cost recovery performance, these statements can also be used to evaluate the results of operations and creditworthiness. The final required financial statements are the Statements of Cash Flows, which provide information about the Watermaster's cash receipts and cash payments during the reporting period. The Statements of Cash Flows report cash receipts, cash payments, and net changes in cash resulting from operations, investing, non-capital financing, and capital and related financing activities, and provides answers to such questions as where did cash come from, what was cash used for, and what was the change in cash balance during the reporting period.

## **Financial Analysis of the Watermaster**

One of the most important questions asked about the Watermaster's finances is, "Is the Watermaster better off or worse off as a result of this year's activities?" The Statements of Net Position and the Statements of Revenues, Expenses, and Changes in Net Position report information about the Watermaster in a way that helps answer this question. These statements include all assets, and liabilities, using the *accrual basis of accounting*, which is similar to the accounting method used by most private sector companies. All of the current year's revenues and expenses are taken into account regardless of when the cash is received or paid.

These two statements report the Watermaster's *net position* and changes in them. You can think of the Watermaster's net position – the difference between assets less liabilities – as one way to measure the Watermaster's financial health, or *financial position*. Over time, *increases or decreases* in the Watermaster's net position are one indicator of whether its *financial health* is improving or deteriorating. However, one will need to consider other non-financial factors such as changes in economic conditions, population growth, zoning, and new or changed government legislation, such as changes in Federal and State water quality standards.

**Borrego Springs Watermaster**  
*Management's Discussion and Analysis, continued*  
For the Year Ended September 30, 2023

**Notes to the Basic Financial Statements**

The notes to the basic financial statements provide additional information that is essential to a full understanding of the data provided in the basic financial statements. The notes to the basic financial statements can be found on pages 10 through 17.

**Statements of Net Position**

**Condensed Statements of Net Position**

	<u>2023</u>	<u>2022</u>	<u>Change</u>
<b>Assets:</b>			
Current assets	\$ 1,852,783	565,068	1,287,715
<b>Total assets</b>	<u>1,852,783</u>	<u>565,068</u>	<u>1,287,715</u>
<b>Liabilities:</b>			
Current liabilities	797,074	69,632	727,442
<b>Total liabilities</b>	<u>797,074</u>	<u>69,632</u>	<u>727,442</u>
<b>Net position:</b>			
Unrestricted	1,055,709	495,436	560,273
<b>Total net position</b>	<u>\$ 1,055,709</u>	<u>495,436</u>	<u>560,273</u>

As noted earlier, net position may serve over time as a useful indicator of financial position. In the case of the Watermaster, assets exceeded liabilities by \$1,055,709, as of September 30, 2023.

At the end of fiscal year 2023, the Watermaster reflected a positive balance in its unrestricted net position of \$1,055,709, that may be utilized in future years. See note 3 for further discussion.

**Statements of Revenues, Expenses, and Changes in Net Position**

**Condensed Statements of Revenues, Expenses, and Changes in Net Position**

	<u>2023</u>	<u>2022</u>	<u>Change</u>
<b>Revenues:</b>			
Operating revenues	\$ 1,541,949	568,596	973,353
<b>Total revenues</b>	<u>1,541,949</u>	<u>568,596</u>	<u>973,353</u>
<b>Expenses:</b>			
Operating expenses	952,850	811,227	141,623
Non-operating expense	28,826	-	28,826
<b>Total expenses</b>	<u>981,676</u>	<u>811,227</u>	<u>170,449</u>
<b>Change in net position</b>	560,273	(242,631)	802,904
<b>Net position, beginning of year</b>	<u>495,436</u>	<u>738,067</u>	<u>(242,631)</u>
<b>Net position, end of year</b>	<u>\$ 1,055,709</u>	<u>495,436</u>	<u>560,273</u>

**Borrego Springs Watermaster**  
*Management's Discussion and Analysis, continued*  
**For the Year Ended September 30, 2023**

**Statements of Revenues, Expenses, and Changes in Net Position, continued**

In 2023, net position increased 113% or \$560,273 to \$1,055,709, as a result of ongoing operations.

In 2023, total revenues increased 171% or \$973,353 to \$1,541,949, primarily due to increases of \$886,033 in grant revenues, and \$191,091 in administrative assessments; which were offset by a decrease of \$101,313 in reimbursement revenues.

In 2023, total expenses increased 21% or \$170,449 to \$981,676, primarily due to an increase of \$650,684 in grant expenditures, which was offset by decreases of \$362,961 in consulting services, and \$124,711 in reimbursement expenses.

**Conditions Affecting Current Financial Position**

Management is unaware of any other conditions which could have a significant impact on the Watermaster's current financial position, net position, or operating results based on past, present, and future events.

**Requests for Information**

This financial report is designed to provide the Watermaster's present users, including funding sources, customers, stakeholders, and other interested parties with a general overview of the Watermaster's finances and to demonstrate the Watermaster's accountability with an overview of the Watermaster's financial operations and financial condition. Should the reader have questions regarding the information included in this report or wish to request additional financial information, please contact the Watermaster's Executive Director, at West Yost, 23692 Birtcher Drive Lake Forest, California, 92630.

# **Basic Financial Statements**

**Borrego Springs Watermaster**  
**Statement of Net Position**  
**September 30, 2023**

	<u>2023</u>
<b>Current assets:</b>	
Cash and cash equivalents (note 2)	\$ 889,614
Accounts receivable	50,421
Grants receivable (note 3)	886,033
Prepaid expenses	<u>26,715</u>
<b>Total current assets</b>	<u>1,852,783</u>
<b>Total assets</b>	<u>1,852,783</u>
<b>Current liabilities:</b>	
Accounts payable and accrued expenses (note 3)	<u>797,074</u>
<b>Total current liabilities</b>	<u>797,074</u>
<b>Total liabilities</b>	<u>797,074</u>
<b>Net position:</b>	
Unrestricted	<u>1,055,709</u>
<b>Total net position</b>	<u>\$ 1,055,709</u>

See accompanying notes to the basic financial statements

**Borrego Springs Watermaster**  
**Statement of Revenues, Expenses, and Changes in Net Position**  
**For the Year Ended September 30, 2023**

	<u>2023</u>
<b>Operating revenues:</b>	
Administrative assessments	\$ 649,021
Grant revenues	886,033
Meter read revenues	<u>6,895</u>
<b>Total operating revenues</b>	<u>1,541,949</u>
<b>Operating expenses:</b>	
Grant expenditures	650,684
Meter read expenses	5,917
Consulting services	181,249
Legal fees	78,829
Reimbursements	2,974
Insurance	<u>33,197</u>
<b>Total operating expenses</b>	<u>952,850</u>
<b>Operating income</b>	<u>589,099</u>
<b>Non-operating expenses:</b>	
Other expenses	<u>(28,826)</u>
<b>Total non-operating expenses</b>	<u>(28,826)</u>
<b>Change in net position</b>	560,273
<b>Net position, beginning of year</b>	<u>495,436</u>
<b>Net position, end of year</b>	<u>\$ 1,055,709</u>

See accompanying notes to the basic financial statements

**Borrego Springs Watermaster**  
**Statement of Cash Flows**  
**For the Year Ended September 30, 2023**

	<u>2023</u>
<b>Cash flows from operating activities:</b>	
Cash receipts from parties to the judgment	\$ 620,330
Cash payments for programs, vendors and suppliers	<u>(225,408)</u>
<b>Net cash provided by operating activities</b>	<u>394,922</u>
<b>Cash flows from non-capital financing activities:</b>	
Other non-operating expenses	<u>(28,826)</u>
<b>Net cash used in non-capital financing activities</b>	<u>(28,826)</u>
Net increase in cash and cash equivalents	366,096
<b>Cash and cash equivalents, beginning of year</b>	<u>523,518</u>
<b>Cash and cash equivalents, end of year</b>	<u>\$ 889,614</u>
<b>Reconciliation of cash and cash equivalents to the statements of net position:</b>	
Cash and cash equivalents	<u>\$ 889,614</u>
<b>Total cash and cash equivalents</b>	<u>\$ 889,614</u>
<b>Reconciliation of operating income to net cash provided by operating activities:</b>	
<b>Operating income</b>	<u>\$ 589,099</u>
<b>Changes in assets and liabilities:</b>	
(Increase) decrease in assets:	
Accounts receivable	(28,710)
Grants receivable	(886,033)
Prepaid expenses	(6,876)
Increase (decrease) in liabilities:	
Accounts payable and accrued expenses	<u>727,442</u>
<b>Total adjustments</b>	<u>(194,177)</u>
<b>Net cash provided by operating activities</b>	<u>\$ 394,922</u>

See accompanying notes to the basic financial statements

**Borrego Springs Watermaster**  
**Notes to the Financial Statements**  
**For the Year Ended September 30, 2023**

**(1) Reporting Entity and Summary of Significant Accounting Policies**

**A. Organization and Operations of the Reporting Entity**

In January 2020, a complaint seeking a comprehensive adjudication of the groundwater rights of the Basin was filed by the Borrego Water District in the Superior Court for San Diego County, pursuant to Code of Civil Procedure (CCP) sections 830, et seq (Borrego Water District v. All Persons Who Claim a Right to Extract Groundwater in the Borrego Valley Groundwater Subbasin, et., San Diego Superior Court case no. 37-2020-0005776-CU-TT-CTL). The proposed Stipulated Judgment was filed with the Court pursuant to a Settlement Agreement that was signed by Settling Parties that are responsible for over 90 percent of the groundwater pumping in the Basin. The Settlement Agreement also provided for the establishment of an Interim Borrego Springs Watermaster to assume responsibility for the sustainable management of the Basin pursuant to the terms of the Judgment until finalized by the Court. The Interim Borrego Springs Watermaster held its first meeting on March 31, 2020.

On April 8, 2021, the honorable Judge Peter Wilson of the CA Superior Court for the County of Orange granted the motion for entry of the Stipulated Judgment (Judgment) which adjudicated the groundwater rights of the Borrego Spring Subbasin. As stated in Section II.F of the Judgment, the Court found that the Physical Solution for the Basin, which is comprised of the Judgment and Groundwater Management Plan for the Borrego Springs Subbasin, is consistent with California Water Code (CWC) Section 10737.8 and is prudent, legal durable means to achieve sustainable groundwater management within the Basin intended by Sustainable Groundwater Management Act.

The Basin has a surface area of approximately 98 square miles or 62,776 acres. The western and southwestern boundary of the Basin is defined by the contact of poorly to moderately consolidated sediments with the plutonic and metamorphic basement of Pinyon Ridge and the San Ysidro Mountains. The northern and eastern boundaries are defined by the mapped trace of the Coyote Creek fault that trends northwest-southeast. East of the Coyote Creek fault lies Coyote Mountain, the Borrego Badlands, and the Ocotillo-Clark Valley Groundwater Basin. The southeastern boundary of the Plan Area is defined by the location of San Felipe Creek, which also marks the northern boundary of the Ocotillo Wells Groundwater Subbasin.

To administer the Judgment, the Court directed appointment of the Watermaster (a five-member board). The court appointed Watermaster Board is made up of five members: The Watermaster normally conducts monthly general meetings of the Board which are held on the second Thursday of the month.

**B. Basis of Accounting and Measurement Focus**

The Watermaster reports its activities as an enterprise fund, which is used to account for operations that are financed and operated in a manner similar to a private business enterprise, where the intent of the Watermaster is that the cost of administering the Judgment on a continuing basis be financed or recovered primarily through various assessments. Revenues and expenses are recognized on the full accrual basis of accounting. Revenues are recognized in the accounting period in which they are earned, and expenses are recognized in the period incurred, regardless of when the related cash flows take place.

Operating revenues and expenses result from exchange transactions associated with the principal activity of the Watermaster. Exchange transactions are those in which each party receives and gives up essentially equal value. Management and administration expenses are also considered operating expenses. Other revenues and expenses not included in the above categories are reported as non-operating revenues and expenses.

**Borrego Springs Watermaster**  
**Notes to the Financial Statements, continued**  
**For the Year Ended September 30, 2023**

**(1) Reporting Entity and Summary of Significant Accounting Policies, continued**

**C. Financial Reporting**

The Watermaster's basic financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP), as applied to enterprise funds. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The Watermaster solely operates as a special-purpose government which means it is only engaged in business-type activities; accordingly, activities are reported in the Watermaster's proprietary fund.

The Watermaster has adopted the following GASB pronouncements in the current year:

In May 2019, the GASB issued Statement No. 91 – *Conduit Debt Obligations*. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. This Statement achieves those objectives by clarifying the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures.

This Statement requires issuers to disclose general information about their conduit debt obligations, organized by type of commitment, including the aggregate outstanding principal amount of the issuers' conduit debt obligations and a description of each type of commitment. Issuers that recognize liabilities related to supporting the debt service of conduit debt obligations also should disclose information about the amount recognized and how the liabilities changed during the reporting period. This Statement did not have a material impact to the financial statements.

In March 2020, the GASB issued Statement No. 94 – *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. The primary objective of this Statement is to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs). As used in this Statement, a PPP is an arrangement in which a government (the transferor) contracts with an operator (a governmental or nongovernmental entity) to provide public services by conveying control of the right to operate or use a nonfinancial asset, such as infrastructure or other capital asset (the underlying PPP asset), for a period of time in an exchange or exchange-like transaction.

Some PPPs meet the definition of a service concession arrangement (SCA), which the Board defines in this Statement as a PPP in which (1) the operator collects and is compensated by fees from third parties; (2) the transferor determines or has the ability to modify or approve which services the operator is required to provide, to whom the operator is required to provide the services, and the prices or rates that can be charged for the services; and (3) the transferor is entitled to significant residual interest in the service utility of the underlying PPP asset at the end of the arrangement. This Statement also provides guidance for accounting and financial reporting for availability payment arrangements (APAs). As defined in this Statement, an APA is an arrangement in which a government compensates an operator for services that may include designing, constructing, financing, maintaining, or operating an underlying nonfinancial asset for a period of time in an exchange or exchange-like transaction. This Statement did not have a material impact to the financial statements.

**Borrego Springs Watermaster**  
**Notes to the Financial Statements, continued**  
**For the Year Ended September 30, 2023**

**(1) Reporting Entity and Summary of Significant Accounting Policies, continued**

**C. Financial Reporting, continued**

In May 2020, the GASB issued Statement No. 96 – *Subscription-Based Information Technology Arrangements*. This Statement provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) for government end users (governments). This Statement (1) defines a SBITA; (2) establishes that a SBITA results in a right-to-use subscription asset—an intangible asset—and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. To the extent relevant, the standards for SBITAs are based on the standards established in Statement No. 87, Leases, as amended. This Statement did not have a material impact to the financial statements.

In June 2020, the GASB issued Statement No. 97 – *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans—an amendment of GASB Statements No. 41 and No. 84, and a supersession of GASB Statement No. 32*. The primary objectives of this Statement are to (1) increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board and the primary government performs the duties that a governing board typically would perform; (2) mitigate costs associated with the reporting of certain defined contribution pension plans, defined contribution other postemployment benefit (OPEB) plans, and employee benefit plans other than pension plans or OPEB plans (other employee benefit plans) as fiduciary component units in fiduciary fund financial statements; and (3) enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans (Section 457 plans) that meet the definition of a pension plan and for benefits provided through those plans. This Statement did not have a material impact to the financial statements.

**D. Assets, Liabilities, and Net Position**

**1. Use of Estimates**

The preparation of the basic financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts and disclosures. Actual results could differ from those estimates.

**2. Cash and Cash Equivalents**

For the purposes of the statement of cash flows, cash equivalents are defined as short-term, highly liquid investments that are both readily convertible to known amounts of cash or so near their maturity that they present insignificant risk of changes in value because of changes in interest rates and have an original maturity date of three months or less.

**3. Accounts Receivable and Allowance for Uncollectible Accounts**

The Watermaster makes assessments pursuant to the Judgment in the normal course of operations. Management has determined that all amounts are considered collectible. As a result, the Watermaster has not recorded an allowance for doubtful accounts as of September 30, 2023 and 2022, respectively.

**4. Net Position**

The financial statements utilize a net position presentation. Net position is categorized as follows:

- **Unrestricted** – Consists of the net amount of assets, and liabilities that are not included in the determination of the net *investment in capital assets* or *restricted* components of net position.

**Borrego Springs Watermaster**  
**Notes to the Financial Statements, continued**  
**For the Year Ended September 30, 2023**

**(1) Reporting Entity and Summary of Significant Accounting Policies, continued**

**D. Financial Reporting, continued**

**5. Administrative Assessments**

Administrative assessments are levied on the parties to the judgment in an amount sufficient to fund the costs of administering the judgment. During the year ended September 30, 2023, the assessment was \$20.30 per acre foot.

**6. Budgetary Policies**

In accordance with the Judgment, the Watermaster shall prepare a watermaster budget for each year, hold hearings thereon, and adopt a final Watermaster Budget. The annual Watermaster budget will be determined by the Watermaster in an amount necessary to fulfill the duties of Watermaster as prescribed by the Judgment and a reasonable reserve, all of which will be subject to review and revision by the Court. Following the adoption of the Watermaster budget, expenditures within the budgeted items may thereafter be made by Watermaster in the exercise of powers herein granted, as a matter of course. The annual budget process to determine the budget for the each year will be as follows:

June 30<sup>th</sup> – Watermaster publishes the Watermaster budget for ensuing Water Year.

July 31<sup>st</sup> – Any challenge to the budget by a Party must be initiated by notice to the Watermaster.

**(2) Cash and Cash Equivalents**

Cash and cash equivalents as of September 30 are classified in the accompanying financial statements as follows:

<u>2023</u>	
Cash and cash equivalents	\$ 889,614
Total cash and cash equivalents	<u>\$ 889,614</u>

Cash and cash equivalents as of September 30 consist of the following:

Cash and cash equivalents as of June 30, consist of the following:

<u>2023</u>	
Deposits held with financial institutions	\$ 889,614
Total cash and cash equivalents	<u>\$ 889,614</u>

***Custodial Credit Risk***

Custodial credit risk for *deposits* is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits, or will not be able to recover collateral securities that are in the possession of an outside party. The California Government Code and the Watermaster's investment policy do not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits or investments, other than the following provision for deposits: The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. Of the bank balances, up to \$250,000 is federally insured and the remaining balance is collateralized in accordance with the Code; however, the collateralized securities are not held in the Watermaster's name.

**Borrego Springs Watermaster**  
**Notes to the Financial Statements, continued**  
**For the Year Ended September 30, 2023**

**(3) Grants Receivable**

On December 13, 2022, the Borrego Water District (District) entered into a Proposition 68 grant agreement in the amount of \$6,115,833 with the Department of Water Resources. The Watermaster entered into a subgrantee agreement with the District in the amount of \$2,783,590. The grant agreement will assist in financing projects associated with the Sustainable Groundwater Management Grant Program on a reimbursable basis. Watermaster's scope of work consists of Component 6: Biological Restoration of Fallowed Lands (in the amount of \$755,340), and Component 7, Monitoring, Reporting and Groundwater Management Plan (in the amount of \$1,983,250). As of September 30, 2023, grants receivable amounted to \$886,033.

On December 12, 2022 and January 23, 2023, the Watermaster entered into agreements with two of its consultants, West Yost and Land IQ, LLC respectively, that provide for extended payment terms for services performed by these firms, including the work contemplated by the subgrantee agreement. The extended payment terms provide for a maximum deferral of payments totaling \$550,000 and \$200,000 for West Yost and Land IQ, LLC, respectively until January 2026, along with customary provisions for repayment with a simple interest rate of the Wall Street Journal Prime Rate plus 2% divided by 12 at the time the interest charge is calculated.

The terms of the subgrantee agreement require work to be completed and reimbursed conditioned upon receipt by Borrego Water District (District) of grant funds from Department of Water Resources (DWR). The time between when the costs are incurred and when the Watermaster will receive reimbursement from the District is expected to exceed six months. Additionally, the Watermaster may expend amounts to execute the grant projects it believes are reimbursable under the subgrantee agreement for which reimbursement may not be received. As a result, the execution of the grant work could result in the need for additional assessment of the parties that may exceed annual assessment levels. As of September 30, 2023, the Watermaster's accounts payable amounted to \$797,074. Of the total amount, the Watermaster's balance due to West Yost and Land IQ, LLC amounted to \$557,843 and \$222,903, respectively.

**(4) Risk Management**

The Watermaster is exposed to various risks of loss related to torts, theft of, damage to, and destruction of assets; errors and omissions; and natural disasters. The Watermaster is insured for a variety of potential exposures. The following is a summary of the insurance policies carried by the Watermaster as of September 30, 2023.

The following is a summary of insurance policies carried by the Watermaster as of September 30, 2023:

- Commercial General Liability: \$3,000,000 General Aggregate Limit (Other than Products/Completed Operations); \$3,000,000 Products/Completed Operations Aggregate Limit (Any One Person or Organization); \$1,000,000 Personal and Advertising Injury Limit; \$1,000,000 Each Occurrence Limit; \$1,000,000 Rented To You Limit; \$10,000 Medical Expenses Limit (Any One Person); and \$1,000,000 Hired and Non-Owned Auto Liability Coverage.
- Commercial Excess Liability: Limits of Liability are \$1,000,000 Retained Limit, \$1,000,000 Each Occurrence, \$1,000,000 General Aggregate Limit, \$1,000,000 Products/Completed Operations to Aggregate.
- Public Officials and Management Liability: \$3,000,000 Aggregate Limit of Liability Coverage; \$1,000,000 Each Wrongful or Offense Limit (if Occurrence); N/A Each Claim Limit (if Claims-Made)

**Borrego Springs Watermaster**  
**Notes to the Financial Statements, continued**  
**For the Year Ended September 30, 2023**

**(4) Risk Management, continued**

- Settled claims have not exceeded any of the coverage amounts in any of the last three years and there were no reductions in the Watermaster's insurance coverage during the years ended September 30, 2023, 2022 and 2021. Liabilities are recorded when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated net of the respective insurance coverage. Liabilities include an amount for claims that have been incurred but not reported (IBNR). There was no IBNR claims payable as of September 30, 2023, 2022 and 2021.

**(5) Governmental Accounting Standards Board Statements Issued, Not Yet Effective**

The Governmental Accounting Standards Board (GASB) has issued several pronouncements prior to September 30, 2023, that has effective dates that may impact future financial presentations.

***Governmental Accounting Standards Board Statement No. 99***

In April 2022, the GASB issued Statement No. 99 – *Omnibus 2022*. The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees.

The requirements of this Statement will enhance comparability in the application of accounting and financial reporting requirements and will improve the consistency of authoritative literature. Consistent authoritative literature enables governments and other stakeholders to locate and apply the correct accounting and financial reporting provisions, which improves the consistency with which such provisions are applied. The comparability of financial statements also will improve as a result of this Statement. Better consistency and comparability improve the usefulness of information for users of state and local government financial statements.

The requirements of this Statement are effective for fiscal years beginning after June 15, 2023, and all reporting periods thereafter. Earlier application is encouraged.

***Governmental Accounting Standards Board Statement No. 100***

In June 2022, the GASB issued Statement No. 100 – *Accounting Changes and Error Corrections – An Amendment of GASB Statement No. 62*. The primary objective of this Statement is to enhance accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability.

This Statement defines accounting changes as changes in accounting principles, changes in accounting estimates, and changes to or within the financial reporting entity and describes the transactions or other events that constitute those changes. As part of those descriptions, for (1) certain changes in accounting principles and (2) certain changes in accounting estimates that result from a change in measurement methodology, a new principle or methodology should be justified on the basis that it is preferable to the principle or methodology used before the change. That preferability should be based on the qualitative characteristics of financial reporting—understandability, reliability, relevance, timeliness, consistency, and comparability. This Statement also addresses corrections of errors in previously issued financial statements.

The requirements of this Statement will improve the clarity of the accounting and financial reporting requirements for accounting changes and error corrections, which will result in greater consistency in application in practice. In turn, more understandable, reliable, relevant, consistent, and comparable information will be provided to financial statement users for making decisions or assessing accountability. In addition, the display and note disclosure requirements will result in more consistent, decision useful, understandable, and comprehensive information for users about accounting changes and error corrections.

**Borrego Springs Watermaster**  
**Notes to the Financial Statements, continued**  
**For the Year Ended September 30, 2023**

**(5) Governmental Accounting Standards Board Statements Issued, Not Yet Effective, continued**

***Governmental Accounting Standards Board Statement No. 100, continued***

The requirements of this Statement are effective for accounting changes and error corrections made in fiscal years beginning after June 15, 2023, and all reporting periods thereafter. Earlier application is encouraged.

***Governmental Accounting Standards Board Statement No. 101***

In June 2022, the GASB issued Statement No. 101 – *Compensated Absences*. The objective of this Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. That objective is achieved by aligning the recognition and measurement guidance under a unified model and by amending certain previously required disclosures.

This Statement requires that liabilities for compensated absences be recognized for (1) leave that has not been used and (2) leave that has been used but not yet paid in cash or settled through noncash means. A liability should be recognized for leave that has not been used if (a) the leave is attributable to services already rendered, (b) the leave accumulates, and (c) the leave is more likely than not to be used for time off or otherwise paid in cash or settled through noncash means. Leave is attributable to services already rendered when an employee has performed the services required to earn the leave. Leave that accumulates is carried forward from the reporting period in which it is earned to a future reporting period during which it may be used for time off or otherwise paid or settled. In estimating the leave that is more likely than not to be used or otherwise paid or settled, a government should consider relevant factors such as employment policies related to compensated absences and historical information about the use or payment of compensated absences. However, leave that is more likely than not to be settled through conversion to defined benefit postemployment benefits should not be included in a liability for compensated absences.

The requirements of this Statement are effective for fiscal years beginning after December 15, 2023, and all reporting periods thereafter. Earlier application is encouraged.

***Governmental Accounting Standards Board Statement No. 102***

In December 2023, the GASB issued Statement No. 102 – *Certain Risk Disclosures*. The primary objective of this Statement requires a government to assess whether a concentration or constraint makes the primary government reporting unit or other reporting units that report a liability for revenue debt vulnerable to the risk of a substantial impact. Additionally, this Statement requires a government to assess whether an event or events associated with a concentration or constraint that could cause the substantial impact to have occurred, have begun to occur, or are more likely than not to begin to occur within 12 months of the date the financial statements are issued.

The requirements of this Statement are effective for fiscal years beginning after June 15, 2024, and all reporting periods thereafter. Earlier application is encouraged.

**Borrego Springs Watermaster**  
**Notes to the Financial Statements, continued**  
**For the Year Ended September 30, 2023**

**(6) Commitments and Contingencies**

***Grant Awards***

Grant funds received by the Watermaster are subject to audit by the grantor agencies. Such audit could lead to requests for reimbursements to the grantor agencies for expenditures disallowed under terms of the grant. Management of the Watermaster believes that such disallowances, if any, would not be significant.

***Litigation***

In the ordinary course of operations, the Watermaster is subject to claims and litigation from outside parties. After consultation with legal counsel, the Watermaster believes the ultimate outcome of such matters, if any, will not materially affect its financial condition.

***Contracts***

The Watermaster has a variety of agreements with outside parties. As of September 30, 2023, the Watermaster's open balance on contract commitments is \$1,586,605, shown as follows:

<b>Vendor</b>	<b>Project Name</b>	<b>Total Approved Contract</b>	<b>Construction Costs to Date</b>	<b>Balance to Complete</b>
West Yost	Admin and Technical Services	\$ 211,584	-	211,584
West Yost	Component 7 - Monitoring, Reporting, and GMP Update	893,098	-	893,098
West Yost	Component 6 - Biological			
West Yost	Restoration of Fallowed Lands	18,106	-	18,106
Land IQ	Biological Restoration of Fallowed Lands			
Land IQ	Lands	706,480	242,663	463,817
	<b>Total</b>	<b>\$ 1,829,268</b>	<b>242,663</b>	<b>1,586,605</b>

**(7) Subsequent Events**

Events occurring after September 30, 2023, have been evaluated for possible adjustment to the financial statements or disclosure as of March 14, 2024, which is the date the financial statements were available to be issued. The Watermaster is not aware of any further subsequent events that would require recognition or disclosure in the financial statements.

# **Report on Internal Controls and Compliance**





# C.J. Brown & Company CPAs

An Accountancy Corporation

Christopher J. Brown, CPA, CGMA  
Jonathan Abadesco, CPA  
Jeffrey Palmer

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## **Independent Auditor's Report on Internal Controls Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards***

Board of Directors  
Borrego Springs Watermaster  
Borrego Springs, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Borrego Springs Watermaster (Watermaster) as of and for the year ended September 30, 2023, and the related notes to the financial statements, which collectively comprises the Watermaster's basic financial statements, and have issued our report thereon dated March 14, 2024.

### ***Internal Control Over Financial Reporting***

In planning and performing our audit of the financial statements, we considered the Watermaster's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Watermaster's internal control. Accordingly, we do not express an opinion on the effectiveness of the Watermaster's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

### ***Compliance and Other Matters***

As part of obtaining reasonable assurance about whether the Watermaster's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

**Independent Auditor's Report on Internal Controls Over Financial Reporting  
And on Compliance and Other Matters Based on an Audit of Financial Statements  
Performed in Accordance with *Government Auditing Standards*, (continued)**

***Purpose of this Report***

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Watermaster's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Watermaster's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

*C.J. Brown & Company, CPAs*

**C.J. Brown & Company, CPAs**

Cypress, California

March 14, 2024

## Appendix C

### Water Year 2024 Budget Memo - Approved by Board on June 14, 2023

**Borrego Springs Watermaster  
Board of Directors Meeting  
June 14, 2023  
AGENDA ITEM V.B**

**To:** Board of Directors  
**From:** Samantha Adams, Executive Director  
**Date:** June 13, 2023  
**Subject:** Draft Water Year 2024 Budget (possible adoption)

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<input checked="" type="checkbox"/> <b>Recommended Action</b>	<input checked="" type="checkbox"/> <b>Provide Direction to Staff</b>	<input type="checkbox"/> <b>Information and Discussion</b>
<input checked="" type="checkbox"/> <b>Fiscal Impact</b>	<input type="checkbox"/> <b>Cost Estimate: \$</b>	

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**Recommended Action**

Consider approval of the Water Year (WY) 2024 Budget or recommend changes to be brought back for consideration of approval at a Special Board meeting on or before June 30, 2023.

Approval of the WY 2024 Budget includes approval of the following:

- WY 2024 Pumping Assessment of \$458,0000
- An Overproduction Penalty Assessment of \$500 per acre-foot
- Operating expenditures in the amount of \$1,527,952, of which \$1,100,904 is grant-reimbursable work.

**Fiscal Impact:** The operating budget includes expenditures of \$1,527,952. The expenditures will be funded by pumping assessments (\$458,000), payment on pass-through expenses (\$6,664), and grant reimbursements from DWR (\$1,100,904). During WY 2024, cash reserves will be maintained at or near target levels (7 months of operating expenses) by continuing to utilize the Extended Payment Term agreements executed with West Yost and Land IQ.

**Background**

Section IV.E.3 of the Judgment provides for a process and schedule for developing the Watermaster's annual budget and collecting assessments to fund it. The Board has reviewed and discussed the process during the May Board meeting and reviewed and refined the scope of work at the April<sup>1</sup> and May Board meetings. Staff has prepared the enclosed draft budget package for WY 2024 based on the feedback from the Board. The purpose of this memo is to present the draft WY 2024 budget.

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<sup>1</sup> The scope of work was discussed as part of the WY 2023 Budget amendment, which included revising the budget to defer certain tasks to begin in WY 2024, and as part of the Groundwater Monitoring Program, which included recommendations for new work for WY 2024 and beyond.

### **Watermaster Financial Planning Model**

In 2022, to support the development of the WY 2023 Budget, Watermaster staff developed a financial model to project the monthly revenues, expenditures, vendor invoices, deferred payment balances under extended payment terms, interest charges on deferred payments, and payments to vendors. The model was used to prepare a projection for WY 2024 through WY 2028 to support the development of the WY 2024 Budget. For WY 2024, the financial model assumed the following:

- Staff's best judgement as to the approximate monthly schedule of:
  - accrued expenditures on all Watermaster operations
  - assessment invoicing and reimbursement requests
  - payments on vendor invoices
- DWR will reimburse the BWD six months after receiving each quarterly SGM grant report and BWD will issue the reimbursement to Watermaster within 60 days of receiving funds from DWR.
- For each WY, a monthly and average reserve balance target was established that generally represents a balance that would be needed to support the leading seven months of operating expenses. This amount was used each month to determine how much is paid out to West Yost and Land IQ each month. The model is set to always pay on invoices from any non-West Yost/Land IQ vendors in the month following receipt of the invoice (such as RWG Law, auditors, insurance).
- Payments will generally only be made to West Yost and/or Land IQ when the cash reserve balance exceeds the monthly target amount. If the cash reserve is below the target amount, payments will only be made to West Yost and/or Land IQ if the total deferred payment amount with the vendor is projected to exceed the vendor financing limit of \$550,000 established for each vendor.
- Interest will accrue on past-due invoices (over 31 days) at the Wall Street Journal Prime Rate plus 2%. Prime rates were assumed to be 8% over the grant implementation period.

### **WY 2024 Budget**

Table 1 summarizes the proposed line-item operating budget, including revenues, expenditures, deferred payment liabilities, and reserves for WY 2024 and the projected budgets in these categories for WYs 2025 through 2028. The table also shows the approved WY 2023 Budget and the expected WY 2023 year-end balances for each category.

Attachment A, enclosed with this memo is the line-item cost estimate for the West Yost administrative and technical services assumed in the WY 2024 budget.<sup>2</sup>

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<sup>2</sup> The WY 2024 Statement of Work and Contract Amendment for West Yost services will be considered by the Board after the Budget is approved and no later than the September 2023 meeting.

Table 1

Detailed Five-Year Projection of Borrego Springs Watermaster Operating Budget: Water Years 2024 through 2028

Assuming Vendor Extended Payment Terms, 8-Month Delay in DWR Grant Request Reimbursements, and Target for 7-month Operating Reserve

Revenues, Expenditures, and Reserves	Amended WY 2023 Budget	Projected Actual WY 2023	WY 2024	Projected Budget <sup>1</sup>			
				WY 2025	WY 2026	WY 2027	WY 2028
<b>Revenues<sup>2</sup></b>	\$ 649,281	\$ 1,679,164	\$ 1,561,374	\$ 1,138,324	\$ 256,863	\$ 557,069	\$ 557,281
Pumping Assessments Collected	\$ 658,000	\$ 658,000	\$ 458,000	\$ 250,000	\$ 250,000	\$ 550,000	\$ 550,000
Bad Debt (non-payment on Assessments)	\$ (15,000)	\$ (15,000)	\$ (4,000)	\$ -	\$ -	\$ -	\$ -
Overproduction Penalty Assessments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Revenues Collected for Pass thru Expenses	\$ 6,281	\$ 6,281	\$ 6,469	\$ 6,664	\$ 6,863	\$ 7,069	\$ 7,281
DWR Prop 68 Grant Reimbursements <sup>3</sup>	\$ -	\$ 1,029,883	\$ 1,100,904	\$ 881,661	\$ -	\$ -	\$ -
<b>Total Expenditures<sup>4</sup></b>	<b>\$ 1,241,730</b>	<b>\$ 1,179,205</b>	<b>\$ 1,527,952</b>	<b>\$ 1,109,903</b>	<b>\$ 561,203</b>	<b>\$ 552,022</b>	<b>\$ 567,308</b>
<b>Administrative Services</b>	<b>\$ 333,973</b>	<b>\$ 318,223</b>	<b>\$ 405,695</b>	<b>\$ 377,630</b>	<b>\$ 245,373</b>	<b>\$ 227,317</b>	<b>\$ 233,461</b>
<b>Watermaster Staff Admin Services</b>	<b>\$ 237,772</b>	<b>\$ 228,035</b>	<b>\$ 280,284</b>	<b>\$ 263,872</b>	<b>\$ 188,242</b>	<b>\$ 193,890</b>	<b>\$ 199,706</b>
Board Meetings	\$ 92,508	\$ 93,858	\$ 101,120	\$ 104,153	\$ 80,000	\$ 82,400	\$ 84,872
Technical Advisory Committee Meetings	\$ 29,590	\$ 29,590	\$ 45,326	\$ 30,000	\$ 23,175	\$ 23,870	\$ 24,586
Court Hearings	\$ 5,668	\$ 2,239	\$ 4,016	\$ 4,136	\$ 4,261	\$ 4,388	\$ 4,520
Stakeholder Outreach/Workshops	\$ 12,206	\$ 12,206	\$ 12,590	\$ 12,954	\$ 6,000	\$ 6,180	\$ 6,365
Administration and Management	\$ 67,800	\$ 62,651	\$ 72,628	\$ 72,628	\$ 74,807	\$ 77,051	\$ 79,363
Prop 68 Project Admin and Grant Reporting	\$ 30,000	\$ 27,491	\$ 44,604	\$ 40,000	\$ -	\$ -	\$ -
<b>Other Administrative or Vendor Services</b>	<b>\$ 93,226</b>	<b>\$ 87,213</b>	<b>\$ 125,411</b>	<b>\$ 113,759</b>	<b>\$ 57,130</b>	<b>\$ 33,427</b>	<b>\$ 33,755</b>
Financial Audit	\$ 8,555	\$ 8,425	\$ 10,000	\$ 10,300	\$ 10,609	\$ 10,927	\$ 11,255
Insurance	\$ 35,651	\$ 33,197	\$ 40,474	\$ 41,688	\$ 42,939	\$ 20,000	\$ 20,000
Misc. Expenses	\$ 5,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500
Meter Accuracy Testing Vendors	\$ 13,000	\$ 12,600	\$ 13,500	\$ 14,000	\$ -	\$ -	\$ -
Interest on Vendor Terms During Prop 68 Grant Period <sup>5</sup>	\$ 31,020	\$ 30,492	\$ 58,937	\$ 45,271	\$ 1,083	\$ -	\$ -
<b>Pass Through Expenses</b>	<b>\$ 2,975</b>	<b>\$ 2,975</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Reimbursement to Settling Parties	\$ 716	\$ 716	\$ -	\$ -	\$ -	\$ -	\$ -
Reimbursement to BWD for GSP	\$ 2,259	\$ 2,259	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Legal Services</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 103,000</b>	<b>\$ 106,090</b>	<b>\$ 109,273</b>	<b>\$ 112,551</b>

Table 1

Detailed Five-Year Projection of Borrego Springs Watermaster Operating Budget: Water Years 2024 through 2028

Assuming Vendor Extended Payment Terms, 8-Month Delay in DWR Grant Request Reimbursements, and Target for 7-month Operating Reserve

Revenues, Expenditures, and Reserves	Amended WY 2023 Budget	Projected Actual WY 2023	WY 2024	Projected Budget <sup>1</sup>			
				WY 2025	WY 2026	WY 2027	WY 2028
<b>Technical/Engineering Services</b>	<b>\$ 417,406</b>	<b>\$ 418,248</b>	<b>\$ 744,298</b>	<b>\$ 457,068</b>	<b>\$ 182,877</b>	<b>\$ 188,363</b>	<b>\$ 194,014</b>
<b>General Technical Consultant Services</b>	<b>\$ 203,762</b>	<b>\$ 204,604</b>	<b>\$ 403,556</b>	<b>\$ 369,923</b>	<b>\$ 172,429</b>	<b>\$ 177,602</b>	<b>\$ 182,930</b>
Coordinate/Implement meter reading program	\$ 30,893	\$ 27,739	\$ 30,388	\$ 31,634	\$ 26,889	\$ 27,696	\$ 28,526
Groundwater Monitoring Program	\$ 87,180	\$ 87,351	\$ 99,151	\$ 101,940	\$ 60,000	\$ 61,800	\$ 63,654
Data Management and Data Reporting	\$ 18,083	\$ 18,083	\$ 19,890	\$ 16,567	\$ 14,910	\$ 15,357	\$ 15,818
Annual Report to the Court and DWR	\$ 52,442	\$ 53,028	\$ 50,936	\$ 52,464	\$ 54,038	\$ 55,659	\$ 57,329
Address Inactive Wells via Abandonment/Conversion	\$ -	\$ 3,239	\$ 187,551	\$ 151,210	\$ -	\$ -	\$ -
As-needed technical support	\$ 15,164	\$ 15,164	\$ 15,640	\$ 16,109	\$ 16,592	\$ 17,090	\$ 17,603
Grant services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Consulting Services with TAC Support/Input</b>	<b>\$ 213,644</b>	<b>\$ 213,644</b>	<b>\$ 340,742</b>	<b>\$ 87,144</b>	<b>\$ 10,448</b>	<b>\$ 10,761</b>	<b>\$ 11,084</b>
<b>Technical Work to Support Sustainable Yield Updates</b>	<b>\$ 146,322</b>	<b>\$ 146,322</b>	<b>\$ 200,240</b>	<b>\$ 17,655</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Development of Work Plan for an Expanded	\$ 46,392	\$ 46,392	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Groundwater Quality &amp; Level Monitoring Workplan</b>							
TSS Grant Implementation (new monitoring well)	\$ 11,000	\$ 11,000	\$ -	\$ -	\$ -	\$ -	\$ -
5-Year Update of the GMP (required by DWR)	\$ -	\$ -	\$ 130,654	\$ 59,346	\$ -	\$ -	\$ -
Address Ad Hoc Requests from the Board	\$ 9,930	\$ 9,930	\$ 9,848	\$ 10,143	\$ 10,448	\$ 10,761	\$ 11,084
<b>Environmental Working Group</b>	<b>\$ 384,070</b>	<b>\$ 336,453</b>	<b>\$ 271,490</b>	<b>\$ 165,541</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>
<b>Biological Restoration of Fallow Lands</b>	<b>\$ 378,301</b>	<b>\$ 330,684</b>	<b>\$ 265,394</b>	<b>\$ 159,262</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Ad Hoc Requests and EWG Meetings</b>	<b>\$ 5,769</b>	<b>\$ 5,769</b>	<b>\$ 6,096</b>	<b>\$ 6,279</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>
<b>Services to Parties with Manual Read Meters</b>	<b>\$ 6,281</b>	<b>\$ 6,281</b>	<b>\$ 6,469</b>	<b>\$ 6,664</b>	<b>\$ 6,863</b>	<b>\$ 7,069</b>	<b>\$ 7,281</b>

Table 1

Detailed Five-Year Projection of Borrego Springs Watermaster Operating Budget: Water Years 2024 through 2028

Assuming Vendor Extended Payment Terms, 8-Month Delay in DWR Grant Request Reimbursements, and Target for 7-month Operating Reserve

Revenues, Expenditures, and Reserves	Amended WY 2023 Budget	Projected Actual WY 2023	WY 2024	Projected Budget <sup>1</sup>			
				WY 2025	WY 2026	WY 2027	WY 2028
<b>Liabilities on Payment Terms<sup>6</sup></b>							
<b>Beginning Balance</b>	\$ -	\$ -	\$ 877,108	\$ 305,790	\$ -	\$ -	\$ -
<b>Minimum Monthly Balance</b>	\$ -		\$ 305,790	\$ -	\$ -	\$ -	\$ -
<b>Maximum Monthly Balance</b>	\$ 877,108		\$ 871,840	\$ 633,433	\$ -	\$ -	\$ -
<b>Year-End Balance</b>	\$ 877,108	\$ 803,450	\$ 305,790	\$ 185,580	\$ -	\$ -	\$ -
<b>Cash Reserves<sup>8</sup></b>							
<b>Beginning Cash Reserves</b>	\$ 523,518	\$ 523,518	\$ 842,513	\$ 619,387	\$ 619,387	\$ 397,911	\$ 404,890
<b>Year-End Cash Reserve Balance</b>	\$ 810,229	\$ 842,513	\$ 619,387	\$ 619,387	\$ 397,911	\$ 404,890	\$ 405,950
<u><b>Average Reserve Needed During the Year to Maintain Target Operating Expenses (7-9 months)</b></u>	<u>\$ 723,330</u>	<u>\$ 723,330</u>	<u>\$ 758,197</u>	<u>\$ 619,387</u>	<u>\$ 348,557</u>	<u>\$ 416,883</u>	<u>\$ 425,481</u>
<b>Minimum Month-End Reserve Balance</b>	\$ 581,550		\$ 609,228	\$ 589,838	\$ 335,703	\$ 312,768	\$ 312,768
<b>Average Month-End Reserve Balance</b>	\$ 691,162		\$ 732,374	\$ 610,339	\$ 431,066	\$ 405,765	\$ 409,444
<b>Variance from Desired Reserve</b>	\$ (32,168)	\$ 119,183	\$ (25,822)	\$ (9,048)	\$ 82,509	\$ (11,118)	\$ (16,037)

## Notes

1-- The projected budget is estimated based on Staff's best professional judgement as to how the cost of each line item will change over time. Some tasks increase at an assumed inflation rate of 3%; some tasks decrease in cost with efficiencies, followed by annual inflation increases; and some tasks fluctuate year to year based on the level of effort for non-routine work such as Sustainable Yield updates. For grant funded work, the projection matches the total allowable grant reimbursement.

2 -- Revenues shown are the amounts invoiced by Watermaster to pumpers, or in the case of the DWR grant, they are the amounts that are eligible for reimbursement, during the Water Year. In the case of the DWR Reimbursements, payment on the reimbursement requests are actually delayed by 8 months from request date. This delay in payment is taken into consideration in the financial model to determine when to defer or pay on vendor invoices to maintain the target cash reserves.

3 -- A total of \$2,738,590 was awarded for Watermaster projects. See also Note 2.

4 -- Expenditures highlighted in green will be **partially reimbursed** by the Prop 68 grant. Expenditures highlighted in blue will be **fully reimbursed** by the Prop 68 grant. Expenditures shown in bold, purple text are **costs that would not have been incurred (in part or in full)** absent the Prop 68 grant.

5 -- Combined interest to West Yost and Land IQ under proposed Payment Terms allowing an outstanding balance of up to \$550,000 per vendor in any 30-day period.

6 -- Reflects the balance owed to West Yost and Land IQ under Payment Terms allowing outstanding balance of up to \$550,000 each in any 30-day period.

7 -- The cash reserve projections are based on the monthly financial model prepared by Watermaster Staff to support extended payment terms with West Yost and Land IQ, based on expected timing of receipt of payment on Watermaster assessments and reimbursement requests and deferred payments to West Yost and Land IQ.

The information presented in Table 1 is described below:

**Revenues<sup>3</sup>.** Total WY 2024 revenue is **\$1,561,374**. Revenues will be derived from four sources:

- Pumping Assessments: \$458,000. Due to the grant, the Pumping Assessments for WY 2025 and WY 2026 are projected to be lower and likely around \$250,000.
- Bad Debt: -\$4,000. It is assumed that up to \$4,000 in pumping assessments will be written off as bad debt.
- Overproduction Penalty Assessments: \$0. This is revenue received from any Pumpers who exceed their pumping limits defined in the Judgment. It is not yet known the amount of Overproduction, if any, that will incur penalty assessments in WY 2024. The amount will not be known until the start of WY 2024 when the Water Rights Accounting for WY 2023 is completed. The Overproduction Penalty Assessment Rate is assumed to be \$500 per acre-foot. The budget assumes that any Overproduction will be cured by Pumpers to avoid the penalty assessment.
- Revenues for Pass-thru Expenses: \$6,469. In WY 2024 pass thru revenues will include collection of fees from Parties with manual-read meters for Watermaster services related to reading the meters.
- DWR Prop 68 Grant Funds: \$1,100,904. The grant-related revenue is based on Watermaster staff's best estimate of the amount of reimbursable work that will be performed each year.<sup>4</sup>

**Expenditures.** Total expenditures are **\$1,527,952**. The expenditures include the following categories. Tasks that are grant-reimbursable (partial or full) are annotated as bold text.

- Administrative Services: \$405,695. The services include:
  - Watermaster Staff administrative services provided by West Yost: Board meetings, **TAC meetings**, Court hearings, **stakeholder outreach meetings**, administration and management (budget development, financial services, management of records, **website**, support to BPA parties, as-needed support for implementation of the Judgment, project management), and **grant management and reporting**.
  - Other administrative expenses: financial audit, liability insurance, miscellaneous expenses, and **meter accuracy testing**.
  - Interest expenses on Payment Terms with West Yost and Land IQ

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<sup>3</sup> Revenues shown are the amounts invoiced by Watermaster to pumpers, or in the case of the DWR grant, they are the expenditure amounts that are eligible for reimbursement, during the Water Year.

<sup>4</sup> Note that due to the assumed 8-month lag between submittal of quarterly reimbursement requests and receipt of the funds from BWD, the actual payments received from DWR in WY 2024 is projected to be \$1,346,295. This is taken into consideration in the financial model to determine when to defer or pay on vendor invoices to maintain the target cash reserves.

- Legal Services: **\$100,000**. This is for all as-needed legal services from RWG Law, which includes at a minimum attending and support of all Watermaster Board meetings and Court hearings. There are no anticipated changes to the level of service for WY 2024.
- Technical and Engineering Services: **\$744,298**. New technical work tasks not performed in prior water years is denoted with an asterisk (\*). The technical and engineering services include:
  - General Technical Consultant services (\$406,556):
    - **Coordinate and implement meter reading/verification program**
    - **Implement the Groundwater Monitoring Plan\***. Additional work compared to WY 2023 is included to implement the *Final Groundwater Monitoring Plan for the Borrego Springs Subbasin*, including performing public outreach efforts, canvassing and sampling additional monitoring locations added through public outreach efforts, additional time to support improving monitoring protocols and data documentation with cooperators (BWD), re-assessing the distribution of groundwater level monitoring probes (transducers that continuously record water level data).
    - **Data management and reporting to the DWR Monitoring Network Module (MNM)**
    - **WY 2023 Water Rights Accounting Report and Annual Report to the Court/DWR**
    - **Address inactive wells via proper abandonment or conversion to monitoring wells\***
    - As-needed technical services
  - TAC-supported technical work (\$340,742):
    - **Redetermination of the Sustainable Yield**
    - **Five-year review and update of the Groundwater Management Plan\***
    - Address ad-hoc requests from the Board
- Environmental Working Group: **\$271,490**. This includes the **Biological Restoration of Fallowed Lands project** and as-requested EWG meetings. Consulting services for the EWG work are provided by Land IQ and West Yost.
- Services to Parties with Manual-Read Meters: **\$6,469**. This work includes Watermaster staff services (provided by West Yost) and contract services by the BWD to perform the manual meter reading in the field. This work is funded solely by Parties with manual-read meters (see matching revenue line-item).

**Liabilities on Payment Terms.** This section summarizes the estimated balance of payments owed to West Yost under the proposed payment terms. It shows the beginning balance, minimum and maximum monthly balance, and year-end balance. The total liability on Payment Terms with West Yost and Land IQ will be \$877,108 at the beginning of WY 2024 and \$306,597 at the end of WY 2024. The actual balances will vary based on actual monthly spending and timing of DWR reimbursements.

**Cash Reserves.** This section of Table 1 summarizes the projected reserve balances and targets based on the monthly financial model. The reserve targets represent the average reserve needed during the year to maintain a balance that would be needed to support the next seven months of spending. The table shows the beginning cash reserves, the average reserve target, the minimum month-end reserve balance during the year, the average month-end reserve balance, and the variance of the average month-end reserve balance from the desired average reserve balance. From WYs 2024 through 2028, the average month-end reserves range from about \$26,000 less than the average monthly reserve target to 81,000 greater than the target. Overall, although the minimum monthly reserve occasionally dips below the target during this period, the year-end reserve balances are sufficient to support future work in the subsequent fiscal year, under the assumed pumping assessments for the five-year projection.

### **Next Steps**

Based on review and discussion of the draft WY 2024 Budget, the Board may consider approval or request staff to refine the budget for approval at a Special Meeting to occur on or before June 30, 2023.

As a reminder, approval of the WY 2024 Budget includes approval of the following:

- WY 2024 Pumping Assessment of \$458,0000
- An Overproduction Penalty Assessment of \$500 per acre-foot
- Operating expenditures in the amount of \$1,527,952, of which \$1,100,904 is grant-reimbursable work.

Table 2 below summarizes the next steps and schedule for implementing Watermaster's annual budget and collecting assessments to fund it pursuant to Section IV.E.3 of the Judgment, following approval of the WY 2024 Budget.

<b>Table 2</b> <b>Milestones and Schedule to Publish the WY 2023 Budget and Collect Assessments to Fund the Budget</b>		
<b>Judgment Defined Due Dates</b>	<b>WY Action Dates</b>	<b>Milestones</b>
June 30	Jun 30, 2023	Watermaster publishes Budget for ensuing Water Year
July 31	Jul 31, 2023	Any challenge to the budget by a Party must be initiated by notice to the Watermaster
August 30	Aug 30, 2023	Mediation of any challenge to the budget is completed pursuant to Section VII.A(1) of Judgment
October 15	Oct. 16, 2023	Any challenge to the budget by a Party unresolved by mediation will be heard by the Court

<b>Table 2</b> <b>Milestones and Schedule to Publish the WY 2023 Budget and Collect Assessments to Fund the Budget</b>		
<b>Judgment Defined Due Dates</b>	<b>WY Action Dates</b>	<b>Milestones</b>
October 15	Oct. 16, 2023	Watermaster issues notice to each Party of: prior year pumping allocation and pumping, max amount eligible for carryover, estimate of the pumping assessment.
October 31	Oct. 31, 2023	Court order is entered on any Party's challenge to budget heard by the Court
October 31	Oct. 31, 2023	Each Party informs Watermaster of its elections for: carryover, foregoing pumping, or resuming pumping
November	Nov. 22, 2023	Watermaster provides Pumping Assessment invoice to each Party for first installment of Pumping Assessment
December	Dec. 22, 2023	First installment of Pumping Assessment due
May 31	May 31, 2024	Watermaster provides Pumping Assessment invoice to each Party for second installment of Pumping Assessment
June 30	June 30, 2024	Second installment of Pumping Assessment due

Following Board approval of the entire budget package (either on June 14 or a Special Meeting), Staff will:

- Publish the WY 2024 budget to the Watermaster website.
- Report to the Board if any challenges to the Budget are noticed to Watermaster by July 31, 2023.
- Prepare “Statement of Work” (Number 6) based on the proposed scope of services to be provided by West Yost during WY 2024. The Statement of Work No. 6 will be presented to the Board for consideration of approval as an amendment to the existing West Yost Professional Services Agreement (expected August or September 2023).

### Enclosures

Attachment A - West Yost Labor Hours and Fee Estimate to Provide Professional Services to the Borrego Springs Watermaster: Executive Director and Technical Consultant Services for Water Year 2024

## Attachment A: West Yost Labor Hours and Fee Estimate to Provide Professional Services to the Borrego Springs Watermaster: Executive Director and Technical Consultant Services for Water Year 2024

Task and Subtask Descriptions	Labor Hours and Cost													Other Direct Costs					Total Project Costs		Reimbursable Costs Included in Prop 68 Grant Award		
	Executive Director	Lead Technical Consultant	Principal Sci/Eng II	Principal Sci/Eng I	Senior Sci/Geo/Eng II	Associate Sci/Geo/Eng I	Staff Sci/Geo/Eng II	Staff Sci/Geo/Eng I	Field Technician	Administrative III/IV	Task Repetition Multiplier	Total Person Hours	West Yost Labor Cost		Travel	Field Equipment Rental or Purchase	Laboratory	Sub-contractor	Total Direct Costs		Sub-Task	Task	
													Sub-Task	Task									
<b>Task 1 - Meetings and Court Hearings</b>													\$161,174						\$1,878		\$163,052	\$57,916	
1.1 Watermaster Board meetings													\$99,322						\$1,798		\$101,120	\$0	
Prepare for and attend 10 Regular Board meetings (Virtual)	12	5				10		1	10	280	\$77,610								\$0		\$77,610		
Prepare for and attend 2 Regular Board meetings (In Person)	16	8				14		1	2	78	\$21,712								\$1,798		\$23,510		
1.2 Technical Advisory Committee meetings													\$45,326									\$45,326	\$45,326
Prepare for and attend 5 TAC meetings (Virtual)	2.5	10	3			8		1	5	122.5	\$34,235								\$0		\$34,235		
Prepare TAC Recommendation Reports and Memos	2	8				8		2	2	43	\$11,091								\$0		\$11,091		
1.3 Court Hearings													\$3,936									\$80	
As-needed attendance at Court hearings	3													4	12	\$3,936			\$80		\$4,016		
1.4 Stakeholder Outreach (Prop 68 Grant)													\$12,590									\$0	
Stakeholder Open House	7	7				8		2	44	\$12,590									\$0		\$12,590	\$12,590	
<b>Task 2 - Watermaster Administration and Management</b>													\$117,232						\$0		\$117,232	\$51,684	
2.1 Prepare the draft and final Watermaster budget for WY 2023 (including collaboration with the TAC)	20	8				8	4	1	40		\$11,716								\$0		\$11,716	\$0	
2.2 Insurance, accounting, and financial services	12					8		90	1	110		\$19,244							\$0		\$19,244	\$0	
2.3 Management of Records, Documents, and Website	0.3					1.8		0.8	12	33		\$7,080							\$0		\$7,080	\$7,080	
2.4 Track/respond to public communications and requests	0.3					0.3		0.3	12	9		\$2,112							\$0		\$2,112	\$0	
2.5 As-needed support to the BPA Parties	2					1				12	36		\$10,584						\$0		\$10,584	\$0	
2.6 As-requested admin. of the Judgment, Rules & Regs, and GMP	24					10		4	1	38		\$10,732							\$0		\$10,732	\$0	
2.7 General administration and project managements tasks	1					2		1	12	48		\$11,160							\$0		\$11,160	\$0	
2.8 Prop 68 Grant project management and reporting	4					5		8.5	12	210		\$44,604							\$0		\$44,604	\$44,604	

## Attachment A: West Yost Labor Hours and Fee Estimate to Provide Professional Services to the Borrego Springs Watermaster: Executive Director and Technical Consultant Services for Water Year 2024

Task and Subtask Descriptions	Labor Hours and Cost													Other Direct Costs					Total Project Costs		Reimbursable Costs Included in Prop 68 Grant Award		
	Executive Director	Lead Technical Consultant	Principal Sci/Eng II	Principal Sci/Eng I	Senior Sci/Geo/Eng II	Associate Sci/Geo/Eng I	Staff Sci/Geo/Eng II	Staff Sci/Geo/Eng I	Field Technician	Administrative III/IV	Task Repetition Multiplier	Total Person Hours	West Yost Labor Cost		Travel	Field Equipment Rental or Purchase	Laboratory	Sub-contractor	Total Direct Costs		Sub-Task	Task	
													Sub-Task	Task									
<b>Task 3 - Engineering and Technical Services</b>													\$554,637						\$189,661		\$744,298	\$712,410	
3.1 Coordinate and implement meter program													\$30,388						\$0		\$30,388	\$30,388	
a Collect and review annual meter calibration/accuracy reports	2	2					24			1	28		\$6,346						\$0		\$6,346		
b Collect, catalog monthly meter reads and calculate pumping	0.5						2	7.5		12	120		\$24,042						\$0		\$24,042		
3.2 Implement Groundwater Monitoring Program													\$71,251						\$27,900		\$99,151	\$93,751	
a Semi-annual field collection of groundwater level and quality, including inspections of new sites	4	8					5	14		130	2	322	\$48,300		\$5,400	\$1,000	\$7,500	\$14,000	\$27,900		\$76,200		
b Review, QA/QC, and upload of field/lab data to HydroDaVE	1	3.5					8	4	40		2	113	\$22,951						\$0		\$22,951	\$19,890	
3.3 Data Management and Data Reporting													\$19,890						\$0		\$19,890	\$19,890	
a Annual collection, process, and upload of other hydrologic and water quality data	1	2					4			40		1	47	\$9,462						\$0		\$9,462	
b Improve DMS (develop custom reports, upload newly identified legacy data from parties, build out library)	2	4	8				10					1	24	\$6,762						\$0		\$6,762	
c MNW Compliance (fall and spring reporting) and other reporting to								6	12		1	18	\$3,666						\$0		\$3,666		
3.4 Combined Annual Report to the Court and DWR (including water rights accounting)	48	28	6				70	30		16	1	198		\$50,936						\$0		\$50,936	\$50,936
3.5 Address inactive wells via proper abandonment or conversion to monitoring well (outreach and cost estimating)	12	30					12	32		24	1	110		\$25,790		\$1,000			\$160,761		\$187,551	\$186,551	
3.6 As-needed support for implementation of the Judgment, Rules & Regs, and GMP	10	24					4	10	8		1	56		\$15,640						\$0		\$15,640	\$0
<b>TAC Recommended Scope of Work WY 2022</b>																							
3.7 Technical Work to Support Update of Sustainable Yield	60	110	90	90			100	200	120	30	1	800		\$200,240						\$0		\$200,240	\$200,240
3.80 5-Year Update of the GMP	90	120	38		20		140	80		12	1	500		\$130,654						\$0		\$130,654	\$130,654
3.90 Address Ad Hoc Requests from the Board	2	16					8	6	6		1	38		\$9,848						\$0		\$9,848	\$0
<b>Task 4 - Environmental Working Group</b>													\$24,017						\$185		\$24,202	\$18,106	
4.1 Biological Restoration of Fallowed Lands	6	30					18			6	12	1	72		\$17,921		\$185			\$185		\$18,106	\$18,106
4.2 Ad Hoc Requests or EWG Meetings	3	12					6			1	21			\$6,096						\$0		\$6,096	\$0
<b>Task 5 - Services Reimbursed by Parties with Manual-read Meters</b>													\$2,916						\$0		\$2,916	\$0	
5.1 Consulting services to Parties with manual-read meters							0.5	0.5	0.3	12	15			\$2,916						\$0		\$2,916	\$0
<b>Task Totals</b>	593	555	157	90	28	514	600	445	290	314	2,991		\$859,976		\$8,463	\$1,000	\$7,500	\$174,761	\$191,724			\$1,051,700	\$840,116

## Appendix D

### Baseline Pumping Allocations, Revised Exhibit “4” as of October 1, 2023

**Exhibit “4”**  
**BASELINE PUMPING ALLOCATIONS**  
*UPDATED AS OF October 1, 2023*

<b>Owner(s)</b>	<b>Common Property Name</b>	<b>BPA<sup>1</sup> Acre Feet</b>	<b>APN(s)<sup>2</sup></b>	<b>Well Number(s)<sup>2</sup></b>
Agri-Empire <sup>3</sup>		574	140-290-10 140-320-19	010S006E23M001S
Rick and Joan Anson, co-trustees of the Anson Family Trust 08-18-08 <sup>4</sup>		2	Unassigned	Unassigned
Alan & Tracy Asche	B&J Landscaping	5	199-020-04	DEH1980-LWELL-8027
Gary D. & Darlis A. Bailey		7	140-130-42	Unassigned
David and Juli Bauer, co-trustees of the D&J Bauer Family Trust 11-18-04		1,411	140-070-24 140-070-27 140-110-14 140-070-17 140-010-11	WM ID 1245994 WM ID 1245995 WM ID 1245996 WM ID 1245998 WM ID 1245999
Borrego Water District (purchase from D & J Bauer) <sup>5</sup>		415	140-070-18	WM ID 1245997
Borrego Water District (purchase from W. Bauer) <sup>6</sup>		670	140-010-08	DEH2016-LWELL-001642

<sup>1</sup> Parties to the Judgment without BPA rights are not listed. Allocations to the Anza-Borrego Desert State Park and Borrego Unified School District (Borrego Elementary) are separate from BPA, per the terms of the Judgment.

<sup>2</sup> Except for BPA allocated to BWD and mutual water companies, BPA must be assigned to APN(s) and Well Number(s) to be effective per Section III.A of the Judgment. If state well number(s) are not found following a Party's good faith review of DWR's well completion report database, County well files and the Party's available records, the Party shall provide the Watermaster Executive Director with a written summary of such good faith efforts to locate the state well number(s), and the Watermaster Executive Director shall assign local well number(s) (WM ID) in order to account for the Party's exercise of its BPA.

<sup>3</sup> APN Number corrected due to error in original Exhibit 4.

<sup>4</sup> Full amount is water credit to BPA conversion.

<sup>5</sup> In WY 2023, BWD purchased a portion of BPA, including the associated BPA parcel, from David and Juli Bauer, co-trustees of the D&J Bauer Family Trust 11-18-04. The BWD intends to fallow the land in accordance with the Judgment fallowing standards and transfer the BPA rights to its primary BPA rights. Until the land is fallowed, the BPA purchased by BWD remains attached to the BPA Parcel and can only be pumped for use on the subject Parcel. Thus, the BPA assigned to BWD is shown as a stand-alone entry.

<sup>6</sup> In WY 2023, BWD purchased the entirety of BPA, including the associated BPA parcel, from William M. Bauer. The BWD intends to fallow the land in accordance with the Judgment fallowing standards and transfer the BPA rights to its primary BPA rights. Until the land is fallowed, the BPA purchased by BWD remains attached to the BPA Parcel and can only be pumped for use on the subject Parcel. Thus, the BPA assigned to BWD is shown as a stand-alone entry.

<b>Owner(s)</b>	<b>Common Property Name</b>	<b>BPA<sup>1</sup> Acre Feet</b>	<b>APN(s)<sup>2</sup></b>	<b>Well Number(s)<sup>2</sup></b>
Borrego Air Ranch Mutual Water & Improvement Co.	Borrego Air Ranch	12	201-192-08 <sup>7</sup>	011S007E30L001S
Borrego Nazareth LLC	Borrego Springs Resort and Club Circle	1,462	198-021-08-00 198-270-18-00 199-010-16-00 199-010-17-00 199-010-18-00 199-010-19-00 199-010-23-00 199-010-24-00 199-010-25-00 199-010-26-00 199-080-10-00 199-011-04-00 199-100-24-00 199-080-11-00 199-080-20-00 199-080-21-00 199-080-22-00 199-080-15-00 199-080-16-00 199-080-17-00	WM ID 1245829 WM ID 1245942 011S006E09B002S
Borrego Water District	N/A	2,588.3 <sup>8</sup>	N/A	N/A
Raymond A. Carpenter and Susan R. Carpenter, co-trustees of the Carpenter Family Trust 12-11-07		6	140-280-35	Unassigned

<sup>7</sup> Water eligible for use at all parcels served by Borrego Air Ranch Mutual Water & Improvement Co. as shown on the attached service area map, and those parcels will be treated as the Original BPA Parcel.

<sup>8</sup> Includes water credit to BPA conversion of 359 AF of BPA.

<b>Owner(s)</b>	<b>Common Property Name</b>	<b>BPA<sup>1</sup> Acre Feet</b>	<b>APN(s)<sup>2</sup></b>	<b>Well Number(s)<sup>2</sup></b>
Roy Brisbois, trustee of the Conzelman Family Trust A 11-22-83; Steven Mohler, trustee of the Conzelman Family Trust C 11-22-83; Roland J. Jensen, trustee of the Jensen Family Trust 8-05-83; James Sommerville, trustee of the Sommerville Trust 11-22-83 <sup>9</sup>	Cogan Ranch	686	140-130-24-00 140-130-40-00 140-130-43-00	DEH2012-LWELL-21118 <sup>10</sup> WM ID 1245990
Roy Brisbois, trustee of the Conzelman Family Trust A 11-22-83; Steven Mohler, trustee of the Conzelman Family Trust C 11-22-83; Roland J. Jensen, trustee of the Jensen Family Trust 8-05-83; James Sommerville, trustee of the Sommerville Trust 11-22-83	Gable House [served by well located on Cogan Ranch]	486	140-130-01-00	DEH2012-LWELL-21118
Roy Brisbois, trustee of the Conzelman Family Trust A 11-22-83; Steven Mohler, trustee of the Conzelman Family Trust C 11-22-83;	Gigi Ranch	878	140-130-06-00 140-130-07-00 140-130-08-00 140-130-09-00 140-130-10-00 140-130-11-00 140-130-12-00 140-130-13-00	DEH2007-LWELL-18244 <sup>11</sup>

<sup>9</sup> All six of the jointly owned and operated Conzelman/Jensen/Sommerville Trust properties are interconnected, with wells on some of the ranches serving other ranches, as noted.

<sup>10</sup> Does not serve Cogan Ranch; serves Gable House Ranch.

<sup>11</sup> Currently inactive. Owner in process of providing replacement well on the same parcel.

Owner(s)	Common Property Name	BPA <sup>1</sup> Acre Feet	APN(s) <sup>2</sup>	Well Number(s) <sup>2</sup>
Roland J. Jensen, trustee of the Jensen Family Trust 8-05-83; James Sommerville, trustee of the Sommerville Trust 11- 22-83			140-130-14-00 140-130-15-00 140-130-16-00 140-130-17-00 140-130-18-00 140-130-21-00 140-130-22-00 140-130-25-00 140-130-26-00 140-130-27-00 140-130-41-00	
Roy Brisbois, trustee of the Conzelman Family Trust A 11-22- 83; Steven Mohler, trustee of the Conzelman Family Trust C 11-22- 83; Roland J. Jensen, trustee of the Jensen Family Trust 8-05-83; James Sommerville, trustee of the Sommerville Trust 11- 22-83	Peg Leg Ranch	676	140-110-15-00 140-110-16-00	DEH1990-LWELL-10048

<b>Owner(s)</b>	<b>Common Property Name</b>	<b>BPA<sup>1</sup> Acre Feet</b>	<b>APN(s)<sup>2</sup></b>	<b>Well Number(s)<sup>2</sup></b>
Roy Brisbois, trustee of the Conzelman Family Trust A 11-22-83; Steven Mohler, trustee of the Conzelman Family Trust C 11-22-83; Roland J. Jensen, trustee of the Jensen Family Trust 8-05-83; James Sommerville, trustee of the Sommerville Trust 11-22-83	Rancho Caterina	1,379	140-010-03-00 140-010-06-00 140-010-09-00	DEH1993-LWELL-9977 <sup>12</sup> DEH2004-LWELL-15891 <sup>13</sup> DEH2020-LWELL-002643 <sup>14</sup> DEH1995-LWELL-3866 <sup>15</sup>
Roy Brisbois, trustee of the Conzelman Family Trust A 11-22-83; Steven Mohler, trustee of the Conzelman Family Trust C 11-22-83; Roland J. Jensen, trustee of the Jensen Family Trust 8-05-83; James Sommerville, trustee of the Sommerville Trust 11-22-83	De Anza Ranch	636	140-070-22-00	010S006E07A001S <sup>16</sup>
Desert Farm LLC Scott M. Crumrine and Stacey L. Crumrine, co-trustees of the Crumrine Family Trust 04-19-06		21	141-210-61	DEH2015-LWELL-001073

<sup>12</sup> Rancho Caterina Well 1, currently inactive and being replaced by Caterina Well 4 DEH2020-LWELL-002643.

<sup>13</sup> Rancho Caterina Well 3, same as DEH2004-LWELL-15890 [well number changed to correct the APN].

<sup>14</sup> Rancho Caterina Well 4, currently replacing Rancho Caterina Well 1.

<sup>15</sup> Rancho Caterina Well 2.

<sup>16</sup> This well is located on an adjacent property owned by Jensen/Conzelman/Sommerville (APN 1400606400) and operated pursuant to an appurtenant easement.

Owner(s)	Common Property Name	BPA <sup>1</sup> Acre Feet	APN(s) <sup>2</sup>	Well Number(s) <sup>2</sup>
CWC Casa Del Zorro, LLC	La Casa del Zoro Desert Resort and Spa	22	200-030-28-00 200-030-29-00 200-090-05-00 200-090-11-00 200-090-19-00 200-090-20-00 200-090-21-00 200-090-22-00 200-090-23-00 200-090-24-00 200-090-25-00 200-090-27-00 200-090-29-00 200-090-30-00 200-090-31-00 200-090-32-00 200-090-33-00 200-090-34-00 200-090-35-00 200-090-36-00 200-090-37-00 200-090-38-00 200-090-45-00 200-090-47-00 200-090-48-00 200-090-50-00 200-090-63-00 200-090-64-00 200-090-65-00	011S006E23E001S
De Anza Desert Country Club	De Anza Desert Country Club	957	140-185-19 140-242-62 140-261-01 140-264-08 140-242-57-00	010S006E20N001
John B. & Silvia H. Hogan	Desert Flora Nursery	8	199-01-112	Unassigned
John Doljanin <sup>17</sup>	West Coast Trees	887	140-110-19 140-110-20 140-110-24	DEH1979-LWELL-4103 DEH1979-LWELL-4104 DEH1984-LWELL-4102

<sup>17</sup> In WY 2023, T2 Palms, LLC acquired the BPA parcel assigned to John Doljanin through foreclosure. The BPA permanently transfers to T2 Palms, LLC. To exercise the BPA rights, T2 Palms must intervene into the Judgment. A motion to intervene will be heard by the Court in December 2023.

Owner(s)	Common Property Name	BPA <sup>1</sup> Acre Feet	APN(s) <sup>2</sup>	Well Number(s) <sup>2</sup>
			140-290-05 140-290-08	
Genus, L.P. <sup>18</sup>		112	141-030-35-00	Unassigned
John McGrory; JM Roadrunner, LLC	Cogan	536.87	140-130-44 140-130-45 140-029-11 141-030-60	010S006E15D003S <sup>19</sup> 010S006E15D004S
JM Roadrunner, LLC	Road Runner I	671	140-130-28  140-130-34 140-130-35 140-130-36 140-130-38	010S006E15D003S 010S006E15D004S
JM RoadRunner, LLC	Road Runner II	387	141-030-26 141-030-27	WM ID 1245980 WM ID 1245981  010S006E15D003S 010S006E15D004S
Robert Larkins <sup>20</sup>		2	Unassigned	Unassigned
Michael Maiter and John Savittieri <sup>21</sup>		1	200-253-02-00 140-060-54-00 140-060-55-00	Unassigned
Gamini D. Weerasekera	Mountain Springs Organics	103	140-110-21	010S006E17J003S 010S006E17J001S
Manuel & Araceli C. Navarro		14	141-210-16	010S006E34M001S DEH1982-LWELL-1076
Doug & Patricia Munson <sup>22</sup>		1	Unassigned	Unassigned
Ronald Pecoff		114	141-030-14	010S006E29N002S 010S006E29N001S
The Roadrunner Club at Borrego, LP <sup>23</sup>	Roadrunner Golf and Country Club	520	141-210-64-00	WM ID 1245946

<sup>18</sup> Full amount is water credit to BPA conversion.

<sup>19</sup> Each of the three ranches owned by JM Roadrunner, LLC, with John McGrory as its principal, are interconnected, with water produced from some ranches used to serve other ranches.

<sup>20</sup> Full amount is water credit to BPA conversion.

<sup>21</sup> Full amount is water credit to BPA conversion.

<sup>22</sup> Full amount is water credit to BPA conversion.

<sup>23</sup> Includes water credit to BPA conversion of 171 AF of BPA.

Owner(s)	Common Property Name	BPA <sup>1</sup> Acre Feet	APN(s) <sup>2</sup>	Well Number(s) <sup>2</sup>
RTA Borrego, LLC <sup>24</sup>		12	Unassigned	Unassigned
Jose G. & Maria E. Sanchez		4	199-130-03	Unassigned
Seley Ranches, L.P.		2,226	140-070-14 140-070-16 140-090-04	010S006E09G001S 010S006E09Q001S 010S006E09J002S
Soli Organic Inc.		61	141-160-47	DEH2006-LWELL-17726
Max Siefker <sup>25</sup>		2	Unassigned	Unassigned
Brian Siefker, trustee of the Brian Siefker Trust 12-18-01 <sup>26</sup>		3	141-271-07-00	Unassigned
Kent R. Smith, trustee of the Smith Kent R. Revocable Living Trust 01-04-90 <sup>27</sup>		50	141-080-05-00	Unassigned
The Springs RV and Golf Resort, LP	The Springs at Borrego RV Resort and Golf Club	261.7	141-210-62-00 141-210-65-00	WM ID 1245948
T2 Borrego LLC		965	140-010-10 140-070-02	010S006E05F001S 010S006E08B001S
T2 Borrego LLC <sup>28</sup>	Ram's Hill Golf Club	2,536	200-120-20 200-160-26 200-160-27 200-160-28 200-273-03 200-273-08 200-120-29 200-120-30 200-120-31 200-120-39 200-120-41 200-120-48 200-120-51 200-120-52 200-120-53	011S006E24Q002S 011S006E25A001S 011S006E25C002S 011S006E25C001S 011S006E26H001S 011S006E26B001S

<sup>24</sup>Full amount is water credit to BPA conversion.

<sup>25</sup>Full amount is water credit to BPA conversion.

<sup>26</sup> Full amount is water credit to BPA conversion.

<sup>27</sup> Includes water credit to BPA conversion of 32 AF of BPA.

<sup>28</sup> Includes water credit to BPA conversion of 1,523 AF of BPA.

<b>Owner(s)</b>	<b>Common Property Name</b>	<b>BPA<sup>1</sup> Acre Feet</b>	<b>APN(s)<sup>2</sup></b>	<b>Well Number(s)<sup>2</sup></b>
			200-140-12 200-160-30 200-210-21 200-210-22 200-271-03 200-271-04 200-271-06 200-271-07 200-271-15 200-271-16 200-271-21 200-271-22 200-271-23 200-271-24 200-271-29 200-271-32 200-271-35 200-271-36 200-271-37 200-271-38 200-272-08 200-273-02 200-273-04 200-273-05 200-273-06 200-273-07 200-274-02 200-275-08 200-275-09 200-275-10 200-275-11 200-311-12 200-311-13 200-311-14 200-311-15 200-311-16 200-311-17 200-311-18 200-340-49 200-340-50 200-340-51 200-340-91 200-340-92	

Owner(s)	Common Property Name	BPA <sup>1</sup> Acre Feet	APN(s) <sup>2</sup>	Well Number(s) <sup>2</sup>
			200-340-93 200-340-94 200-340-95 200-350-01 200-350-24 200-360-17 200-360-18 200-370-37 200-370-38 200-380-29 200-400-02 200-400-03 200-400-04 200-400-05 200-400-06 200-400-07 200-400-08 200-400-09 200-400-10 200-401-07 201-240-01	
T2 Farms LLC		485	140-070-31	010S006E09C001S (DEH1990-LWELL-6865)
Bagdasarian Farms, LLC <sup>29</sup>		1,142	140-070-15 140-070-20 140-070-28	DEH1990-LWELL-3907 DEH1981-LWELL-10728 <sup>30</sup> DEH2011-LWELL-21069
Joel Vanasdlen		36	199-160-04 199-160-40	Unassigned
Michael C. Ward		82	141-030-28	DEH1991-LWELL-10402
Wisdom Gabriel B&Weis-Wisdom Diana Family 2008 Trust 08-01-08 <sup>31</sup>		1	198-251-07-00 198-251-08-00	Unassigned
William D. Wright and Edna J. Wright, co- trustees of the Wright Family Living Trust 06-19-89		158	141-21-067	010S006E33C002S

<sup>29</sup> Successor-in-interest to Trojan Citrus, LLC.

<sup>30</sup> Currently inactive.

<sup>31</sup> Full amount is water credit to BPA conversion.

<b>Owner(s)</b>	<b>Common Property Name</b>	<b>BPA<sup>1</sup> Acre Feet</b>	<b>APN(s)<sup>2</sup></b>	<b>Well Number(s)<sup>2</sup></b>
Ashley Bilyk and Tyler Bilyk		18.13	140-130-44 <sup>32</sup>	010S006E15D003S <sup>33</sup>
<b>TOTAL BPA</b>		<b>24,293</b>		

<sup>32</sup> Interconnected parcel with John McGrory and JM Roadrunner, LLC.

<sup>33</sup> Each of the three ranches owned by JM Roadrunner, LLC, with John McGrory as its principal, are interconnected, with water produced from some ranches used to serve other ranches. 140-130-44 is only served by one JM Roadrunner well. This well is also used across the JM Roadrunner properties.

## Appendix E

### Amendments to Prior Water Rights Accounting

## Appendix E. Record of Amendments to Water Rights Accounting

Water Year	Description of Change(s) to Water Rights Accounting <sup>1</sup>	Date Changes made to Water Rights Accounting	Attachment
2021	<p>The WY 2021 accounting was amended to account for the over-estimation of WY 2021 pumping for two Parties. Sufficiently detailed meter data was provided in WY 2022 to reasonably re-estimate pumping for WY 2021. Due to the over-estimation, the Parties over-paid assessments in WY 2022. The Parties chose to use the overpayment credit to elect the eligible Carryover that would have been available from WY 2021 had pumping been correctly estimated at the time. The two Parties with amended records are:</p> <ul style="list-style-type: none"> <li>• John Doljanin - Based on metered pumping data, the WY 2021 pumping was adjusted from an estimated 820 acre-feet (af) to a metered value of 384.02 af.</li> <li>• William M. Bauer - Based on metered pumping data, the WY 2021 pumping was adjusted from an estimated 670.16 acre-feet (af) to a metered value of 372.96 af.</li> </ul>	October 2022	E-1
2022	None	na	na

1) Changes to Water Rights Accounting are highlighted in yellow in the associated attachment.

Borrego Springs Watermaster

Water Year 2023

Annual Report for the Borrego Springs Subbasin

Last Revised: 1-12-24

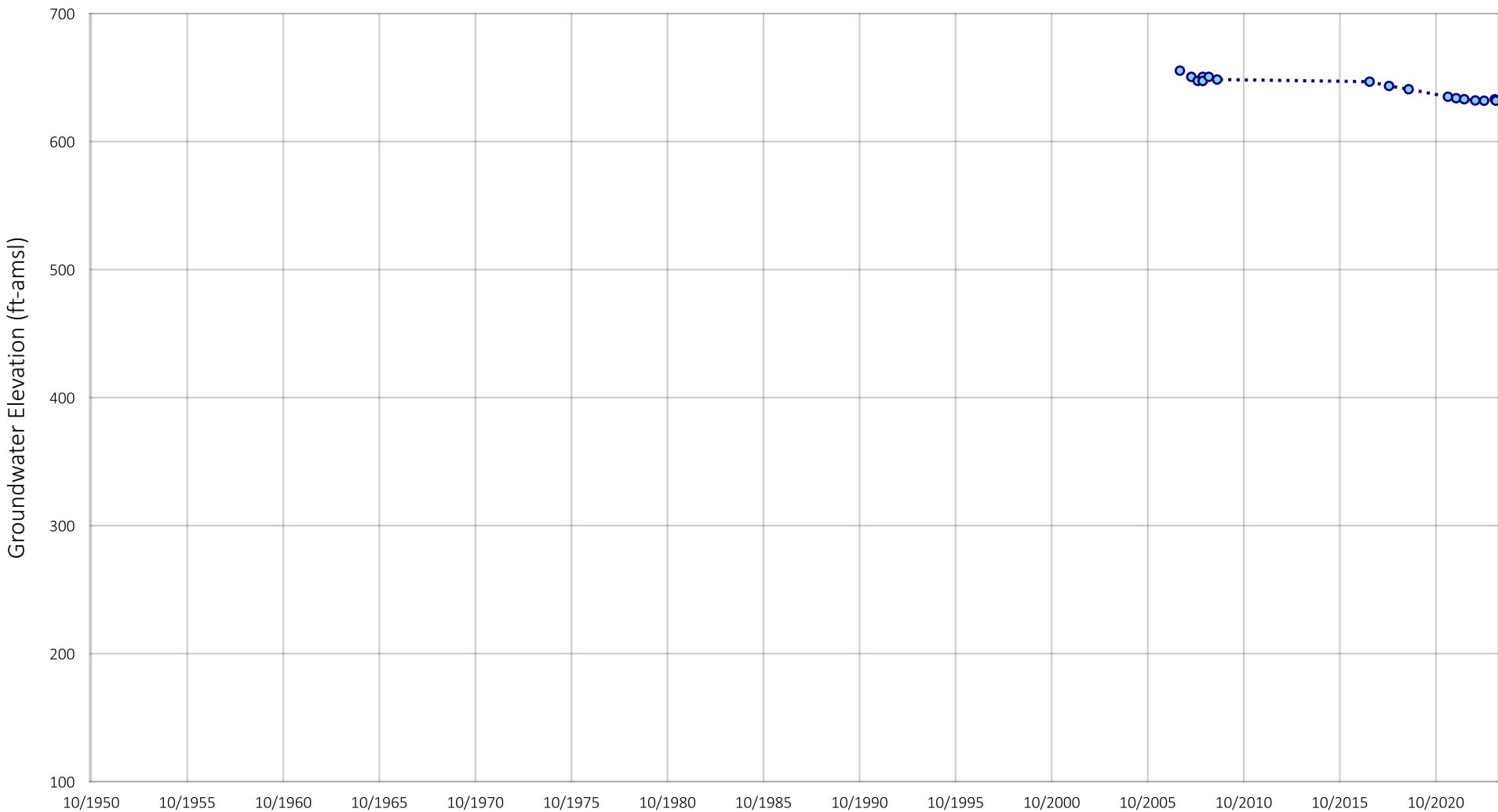
**WEST YOST**

Table 11 - WY 2021 Water Rights Accounting Summary for the Borrego Springs Subbasin - (all values in acre-feet unless otherwise noted)

BPA Party or Party with Other Non-De Minimis Water Rights	BPA or Other Non-De Minimis Rights as of Oct. 1, 2020 <sup>1</sup>	Permanent Transfer of BPA <sup>1,2</sup> in WY 2021	BPA or Other Non-De Minimis Rights as of Sept. 30, 2021	WY 2021 Annual Allocation: 95% of BPA <sup>3</sup> ; 100% of non-BPA rights <sup>4,1</sup>	Carryover Account Balance as of October 1, 2020 <sup>5,1</sup>	Carryover Account Limit <sup>5,1</sup>	Leased or Transferred Annual Allocation in WY 2021 <sup>2</sup>	Total Allowable Pumping for WY 2021	Cumulative Max Over Production Limit for WYs 2021-2023 <sup>6</sup>	Total Pumping in WY 2021	WY 2021 Pumping was Metered or Estimated <sup>7</sup>	% of WY 2021 Annual Allocation Pumped	Carryover Pumped in WY 2021 <sup>8</sup>	Over-Production in WY 2021 <sup>6</sup>	Pumping Allocation Eligible for Carryover <sup>9</sup>	Carryover Election by Party	WY 2021 Adjusted Pumping Calculation
	(a)	(b)	(c) = (a) + (b)	For BPA Parties: (d) = 0.95 x (c) For other Parties: (d) = (c)	(e)	(f) = 2 x (c)	(g)	(h) = (d) + (e) + (g)	(i) = 20% of Annual Allocation in WYs 21, 22, 23	(j)	(k)	(l) = (j) / (d)	(m) <sup>8</sup>	(n) = (j) - (h)	(o) <sup>9</sup>	(p)	(q) = (j) - (g) + (p)
<b>BPA Parties</b>																	
<b>BPA Party Subtotal</b>	<b>24,293</b>		<b>24,293</b>	<b>23,080.00</b>	<b>0.00</b>	<b>48,586.00</b>		<b>23,080.00</b>	<b>13,118.22</b>	<b>14,433.52</b>		<b>63%</b>	<b>0.00</b>	<b>111.61</b>	<b>8,758.09</b>	<b>7,626.68</b>	<b>22,060.20</b>
Agri-Empire	574	0	574	545.00	0	1,148	0.00	545.00	309.96	<b>0.00</b>	na	0%	0.00	0.00	545.00	0.00	0.00
Rick and Joan Anson, co-trustees of the Anson Family Trust 08-18-08	2	0	2	2.00	0	4	0.00	2.00	1.08	<b>0.00</b>	na	0%	0.00	0.00	2.00	0.00	0.00
Alan & Tracy Asche	5	0	5	5.00	0	10	0.00	5.00	2.70	<b>0.85</b>	Estimated (P)	17%	0.00	0.00	4.15	4.15	5.00
Gary D. & Darlis A. Bailey	7	0	7	7.00	0	14	0.00	7.00	3.78	<b>4.26</b>	Estimated	61%	0.00	0.00	2.74	2.74	7.00
David and Juli Bauer, co-trustees of the D&J Bauer Family Trust 11-18-04	1,826	0	1,826	1,735.00	0	3,652	0.00	1,735.00	986.04	<b>1,516.62</b>	Metered	87%	0.00	0.00	218.38	218.38	1,735.00
William M. Bauer	670	0	670	637.00	0	1,340	0.00	637.00	361.80	<b>372.96</b>	Estimated (P)	105%	0.00	<b>0.00</b>	264.04	<b>264.04</b>	<b>637.00</b>
Borrego Air Ranch Mutual Water & Improvement Co.	12	0	12	11.00	0	24	0.00	11.00	6.48	<b>9.42</b>	Metered	86%	0.00	0.00	1.58	1.58	11.00
Borrego Nazareth LLC	1,462	0	1,462	1,389.00	0	2,924	0.00	1,389.00	789.48	<b>58.35</b>	Metered	4%	0.00	0.00	1,330.65	1,330.65	1,389.00
Borrego Water District	2,581	0	2,581	2,452.00	0	5,162	0.00	2,452.00	1,393.74	<b>1,528.84</b>	Metered	62%	0.00	0.00	923.16	923.16	2,452.00
Carpenter Family Trust 12-11-07	6	0	6	6.00	0	12	0.00	6.00	3.24	<b>4.33</b>	Estimated	72%	0.00	0.00	1.67	1.67	6.00
Conzelman/Jensen/Sommerville Family Trusts	4,741	0	4,741	4,504.00	0	9,482	0.00	4,504.00	2,560.14	<b>3,953.81</b>	Metered	88%	0.00	0.00	550.19	550.19	4,504.00
Desert Farm LLC Crumrine Family Trust 04-19-06	21	0	21	20.00	0	42	0.00	20.00	11.34	<b>26.90</b>	Estimated	135%	0.00	6.90	0.00	0.00	26.90
CWC Casa Del Zorro LLC	22	0	22	21.00	0	44	0.00	21.00	11.88	<b>19.59</b>	Metered	93%	0.00	0.00	1.41	1.41	21.00
De Anza Desert Country Club	957	0	957	909.00	0	1,914	0.00	909.00	516.78	<b>828.58</b>	Metered	91%	0.00	0.00	80.42	80.42	909.00
John B. & Silvia H. Hogan	8	0	8	8.00	0	16	0.00	8.00	4.32	<b>6.07</b>	Estimated (P)	76%	0.00	0.00	1.93	1.93	8.00
John Doljanin	887	0	887	843.00	0	1,774	0.00	843.00	478.98	<b>384.02</b>	Estimated (P)	97%	0.00	0.00	458.98	<b>25.98</b>	410.00
Genus L.P.	112	0	112	106.00	0	224	0.00	106.00	60.48	<b>0.00</b>	na	0%	0.00	0.00	106.00	0.00	0.00
JM Roadrunner, LLC	1,613	0	1,613	1,532.00	0	3,226	0.00	1,532.00	871.02	<b>923.33</b>	Metered	60%	0.00	0.00	608.67	608.67	1,532.00
Robert Larkins	2	0	2	2.00	0	4	0.00	2.00	1.08	<b>0.00</b>	na	0%	0.00	0.00	2.00	0.00	0.00
Michael Maiter & John Savittieri	1	0	1	1.00	0	2	0.00	1.00	0.54	<b>0.00</b>	na	0%	0.00	0.00	1.00	1.00	1.00
Gamini D. Weerasekera	103	0	103	98.00	0	206	0.00	98.00	55.62	<b>161.64</b>	Metered	165%	0.00	63.64	0.00	0.00	161.64
Manuel & Araceli C. Navarro	14	0	14	13.00	0	28	0.00	13.00	7.56	<b>13.58</b>	Estimated	104%	0.00	0.58	0.00	0.00	13.58
Monica Real Estate Holdings, LP	18	-18	0	0.00	na	0	na	na	9.72	na	na	na	0.00	na	na	na	na
Doug & Patricia Munson	1	0	1	1.00	0	2	0.00	1.00	0.54	<b>0.00</b>	na	0%	0.00	0.00	1.00	0.00	0.00
Ronald Pecoff	114	0	114	108.00	0	228	0.00	108.00	61.56	<b>84.36</b>	Estimated	78%	0.00	0.00	23.64	0.00	84.36
The Roadrunner Club at Borrego, LP	520	0	520	494.00	0	1,040	0.00	494.00	280.80	<b>386.28</b>	Metered	78%	0.00	0.00	107.72	107.75	494.03
RTA Borrego, LLC	12	0	12	11.00	0	24	0.00	11.00	6.48	<b>0.00</b>	na	0%	0.00	0.00	11.00	0.00	0.00
Jose G. & Maria E. Sanchez	4	0	4	4.00	0	8	0.00	4.00	2.16	<b>1.20</b>	Estimated	30%	0.00	0.00	2.80	0.00	1.20
Selye Ranches, L.P.	2,226	0	2,226	2,115.00	0	4,452	0.00	2,115.00	1,202.04	<b>1,569.44</b>	Metered	74%	0.00	0.00	545.56	545.56	2,115.00
Shenandoah Growers, Inc.	61	0	61	58.00	0	122	0.00	58.00	32.94	<b>90.06</b>	Metered	155%	0.00	32.06	0.00	0.00	90.06
Max Sieker	2	0	2	2.00	0	4	0.00	2.00	1.08	<b>0.00</b>	na	0%	0.00	0.00	2.00	0.00	0.00
Brian Sieker Trust 12-18-01	3	0	3	3.00	0	6	0.00	3.00	1.62	<b>0.00</b>	na	0%	0.00	0.00	3.00	0.00	0.00
Smith Kent R. Revocable Living Trust 01-04-90	32	0	32	30.00	0	64	0.00	30.00	17.28	<b>0.00</b>	na	0%	0.00	0.00	30.00	30.00	30.00
The Springs RV and Golf Resort, LP	287	0	287	273.00	0	574	0.00	273.00	154.98	<b>248.40</b>	Metered	91%	0.00	0.00	24.60	24.60	273.00
T																	

## Appendix F

### Groundwater Level Time Histories – 1950 to 2023



Location of Well in Borrego Springs

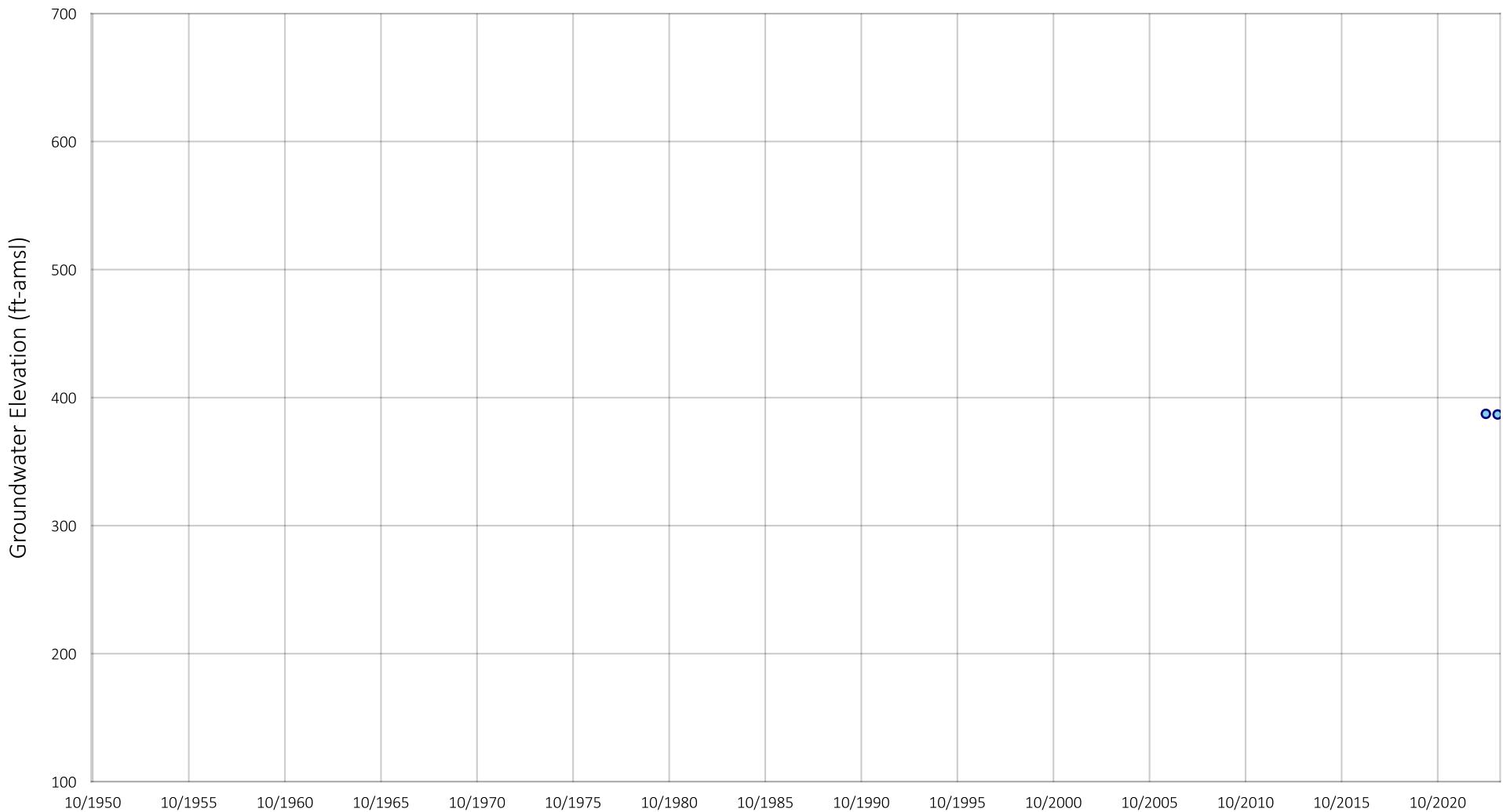


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245876  
Well Name: Horse Camp  
State Well ID: 009S006E31E003S

Figure F-1



Location of Well in Borrego Springs

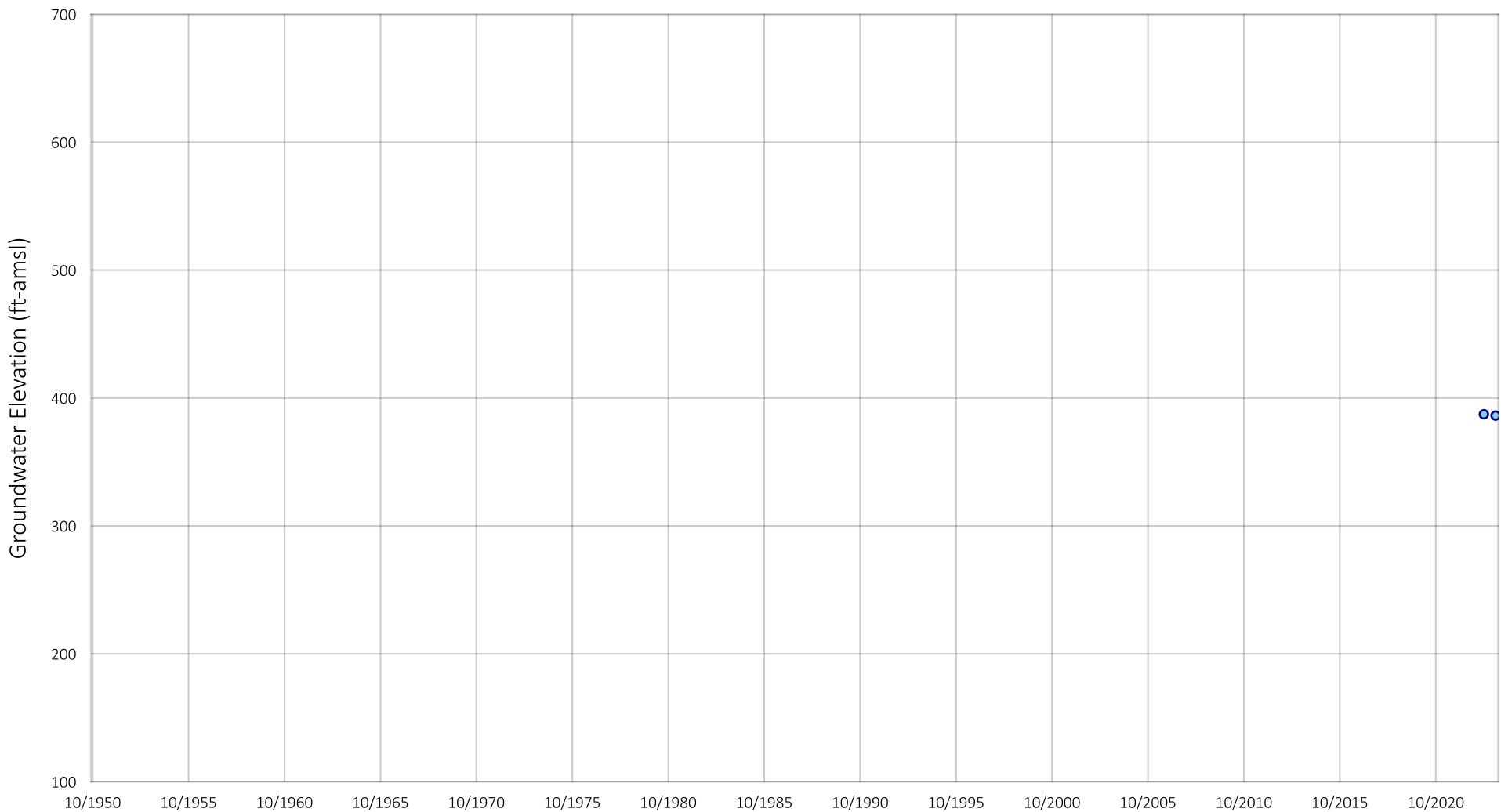


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1246758  
Well Name: MW-6D  
State Well ID: nan

Figure F-2



Location of Well in Borrego Springs

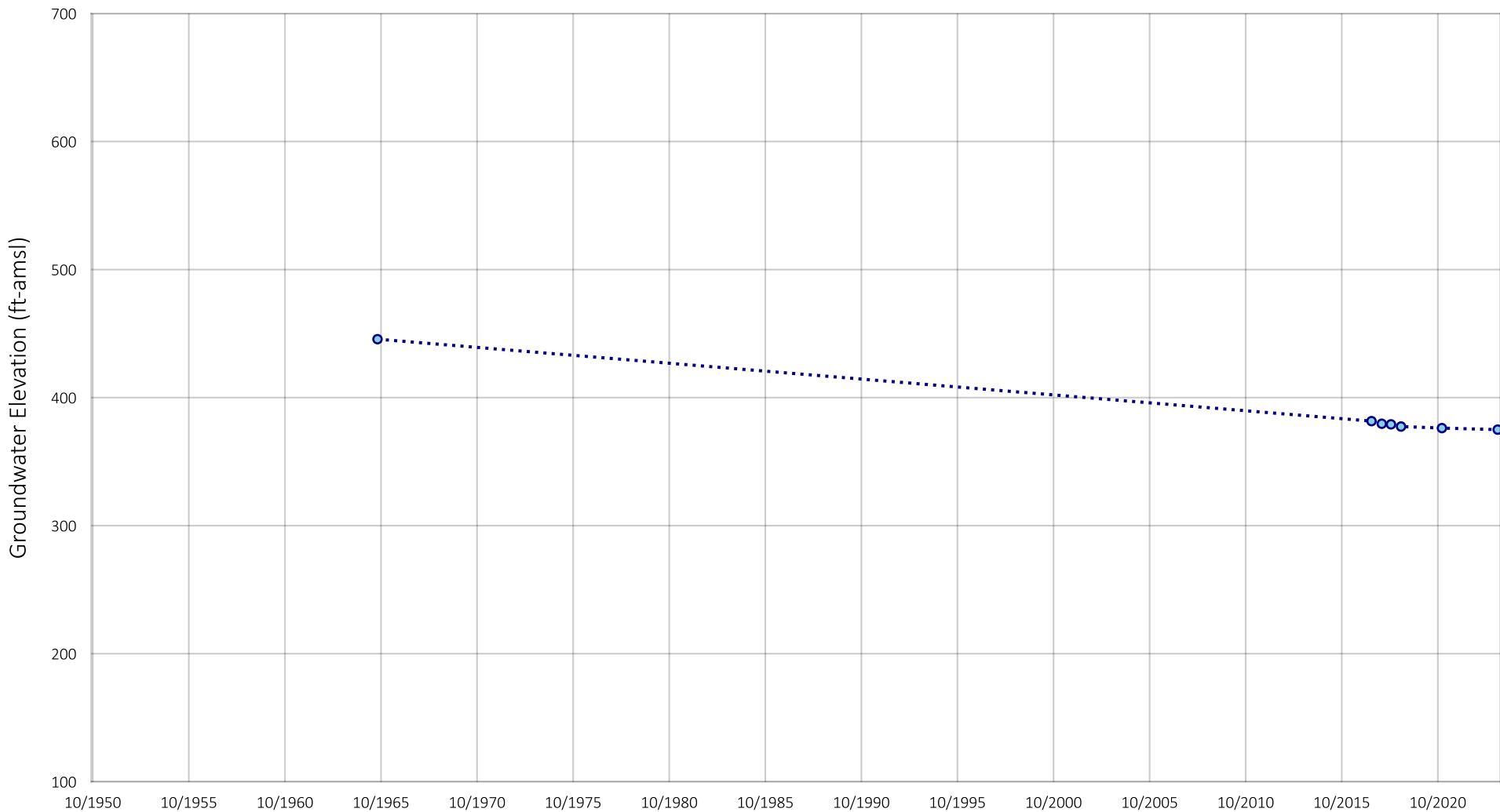


Prepared by:

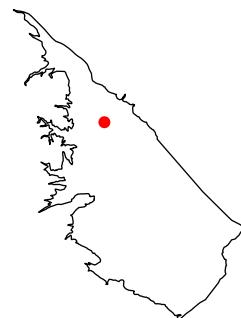


Historical Groundwater Level Elevation  
BSWM ID: 1246759  
Well Name: MW-6S  
State Well ID: nan

Figure F-3



Location of Well in Borrego Springs

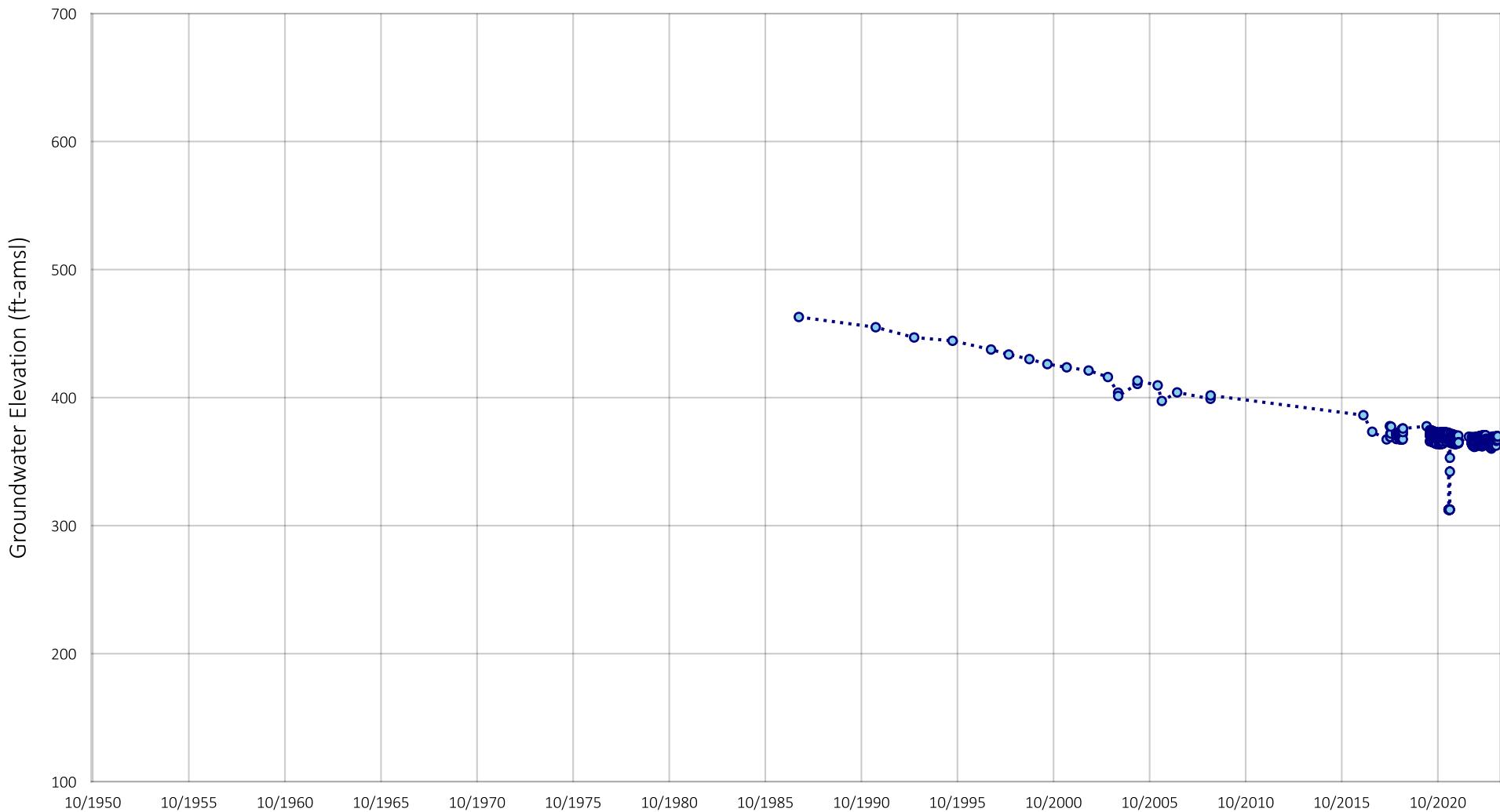


Prepared by:

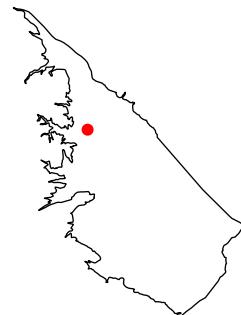


Historical Groundwater Level Elevation  
BSWM ID: 1245869  
Well Name: Fortiner  
State Well ID: 010S006E09N001S

Figure F-4



Location of Well in Borrego Springs

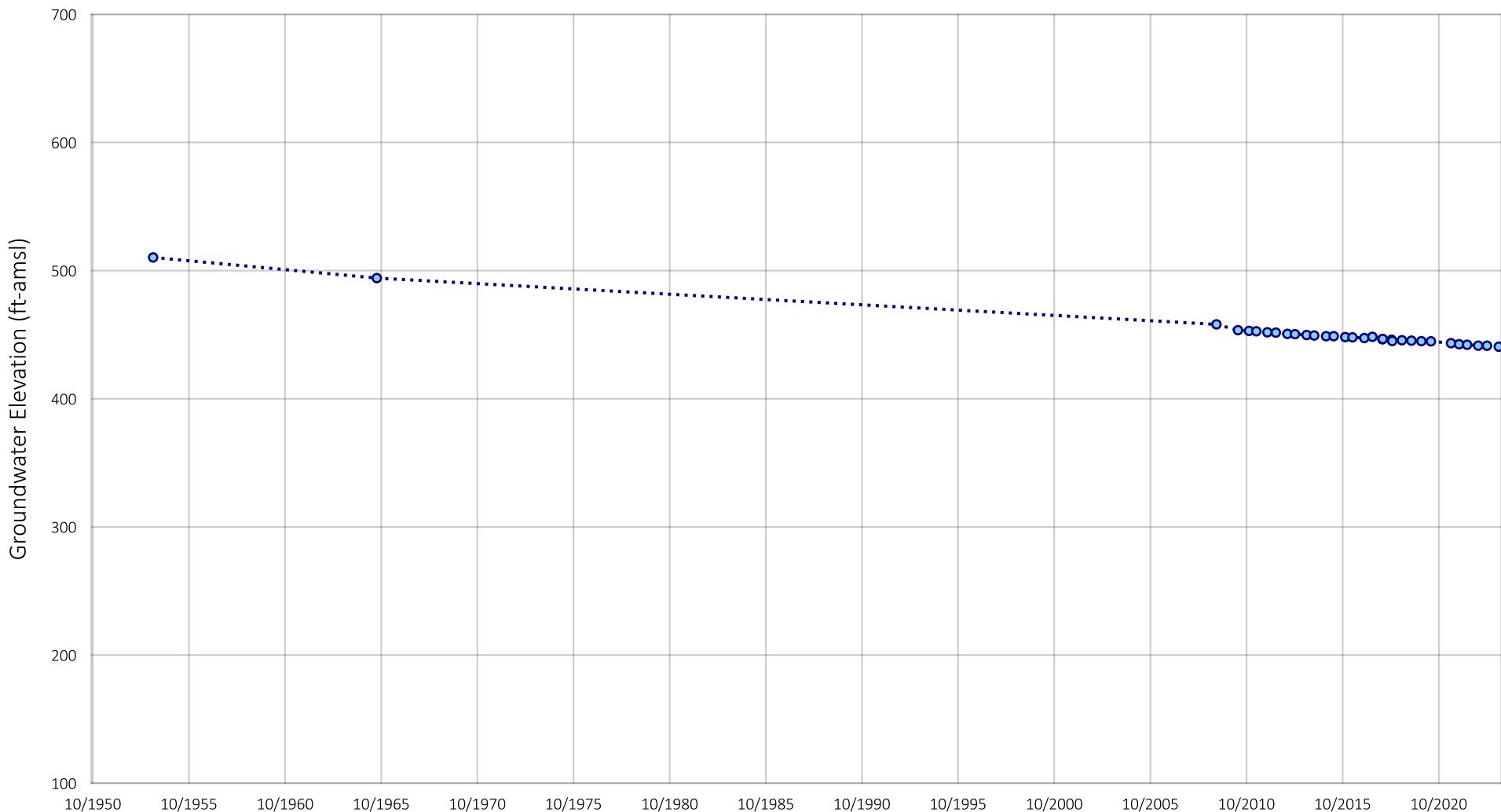


Prepared by:

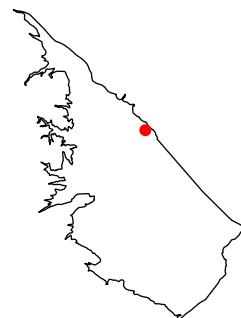


Historical Groundwater Level Elevation  
BSWM ID: 1245886  
Well Name: ID4-18  
State Well ID: 010S006E18J001S

Figure F-5



Location of Well in Borrego Springs

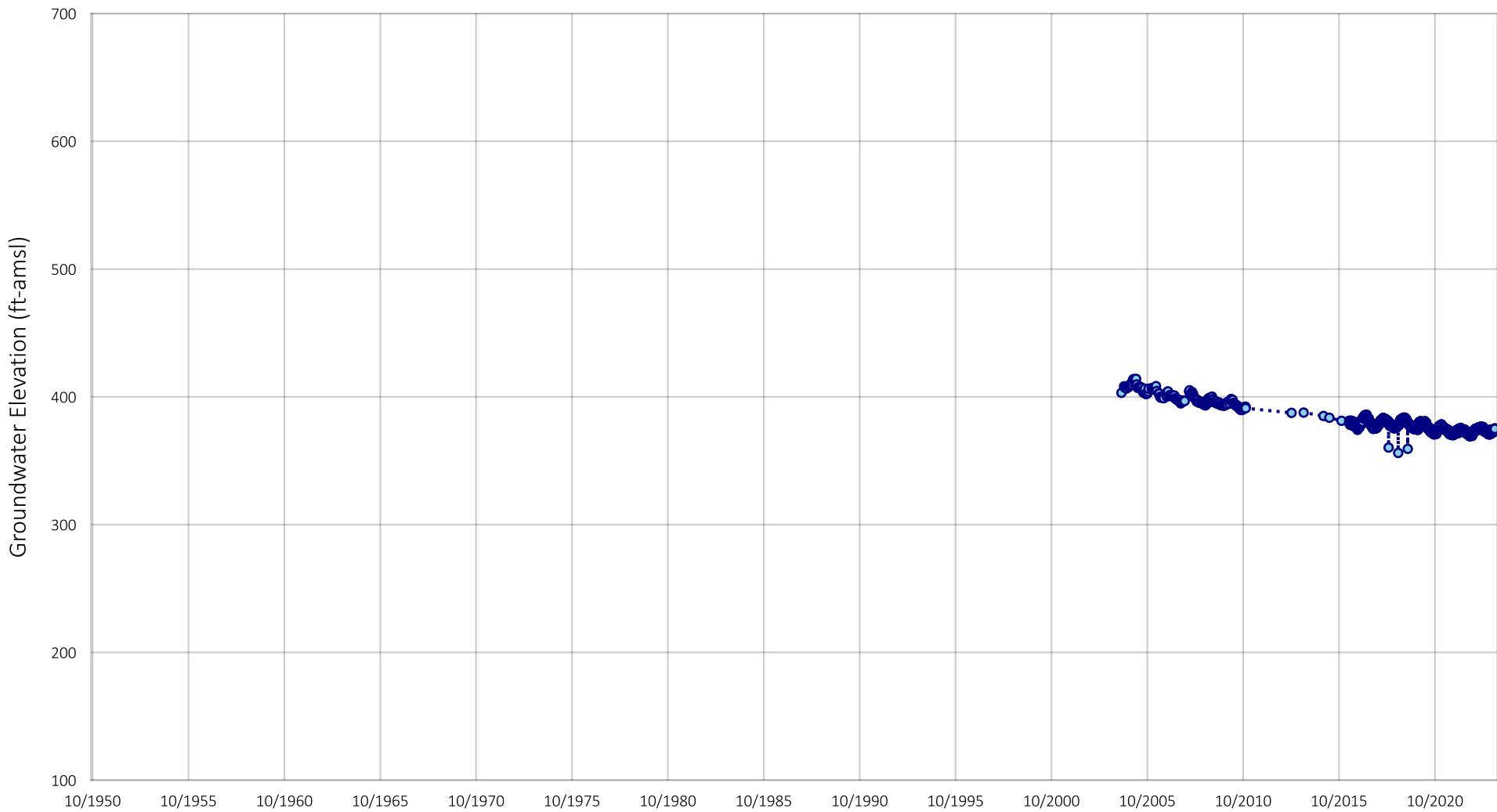


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245873  
Well Name: Hanna (Flowers)  
State Well ID: 010S006E14G001S

Figure F-6



Location of Well in Borrego Springs

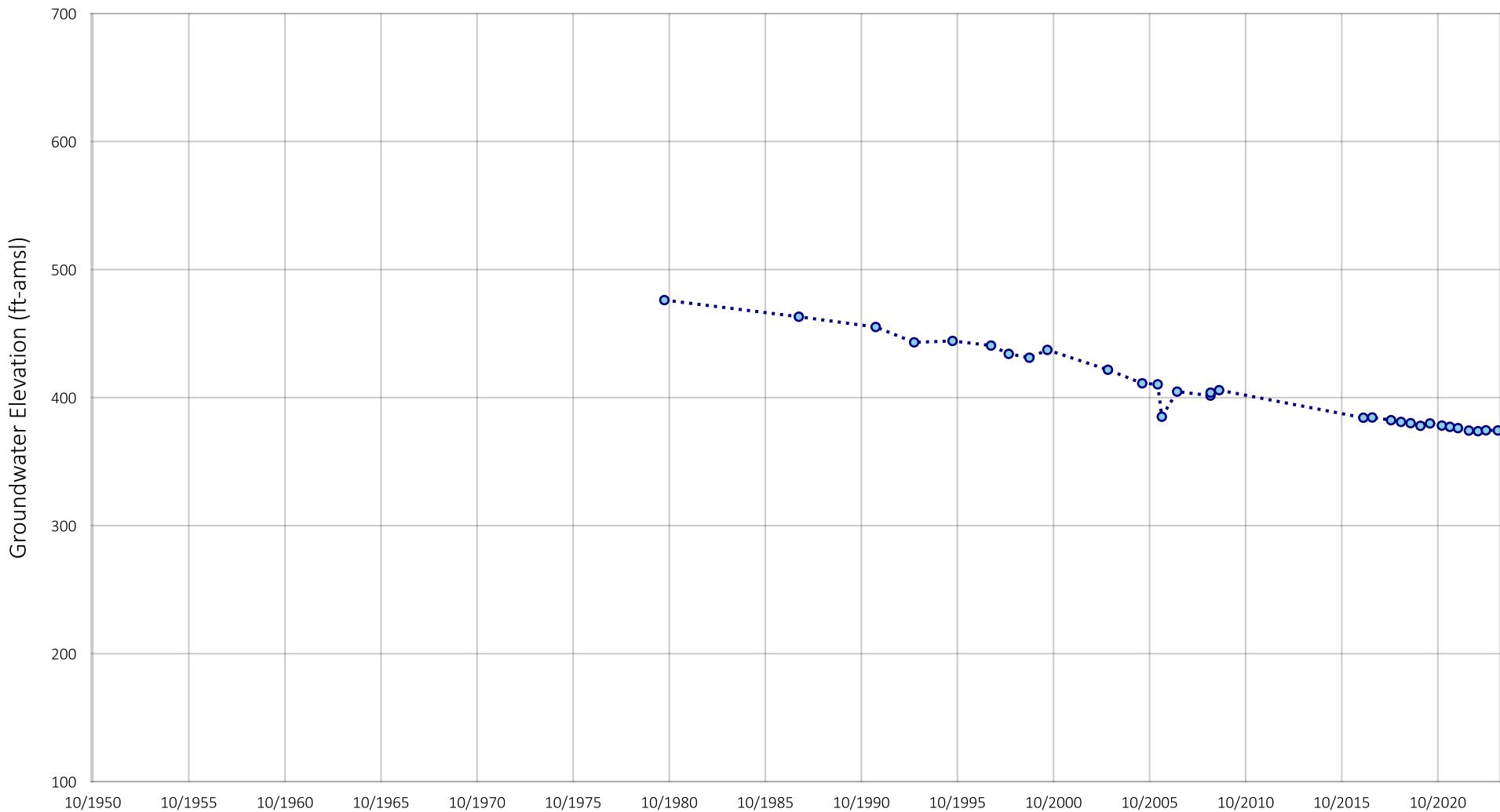


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245897  
Well Name: MW-1  
State Well ID: 010S006E21A002S

Figure F-7



Location of Well in Borrego Springs

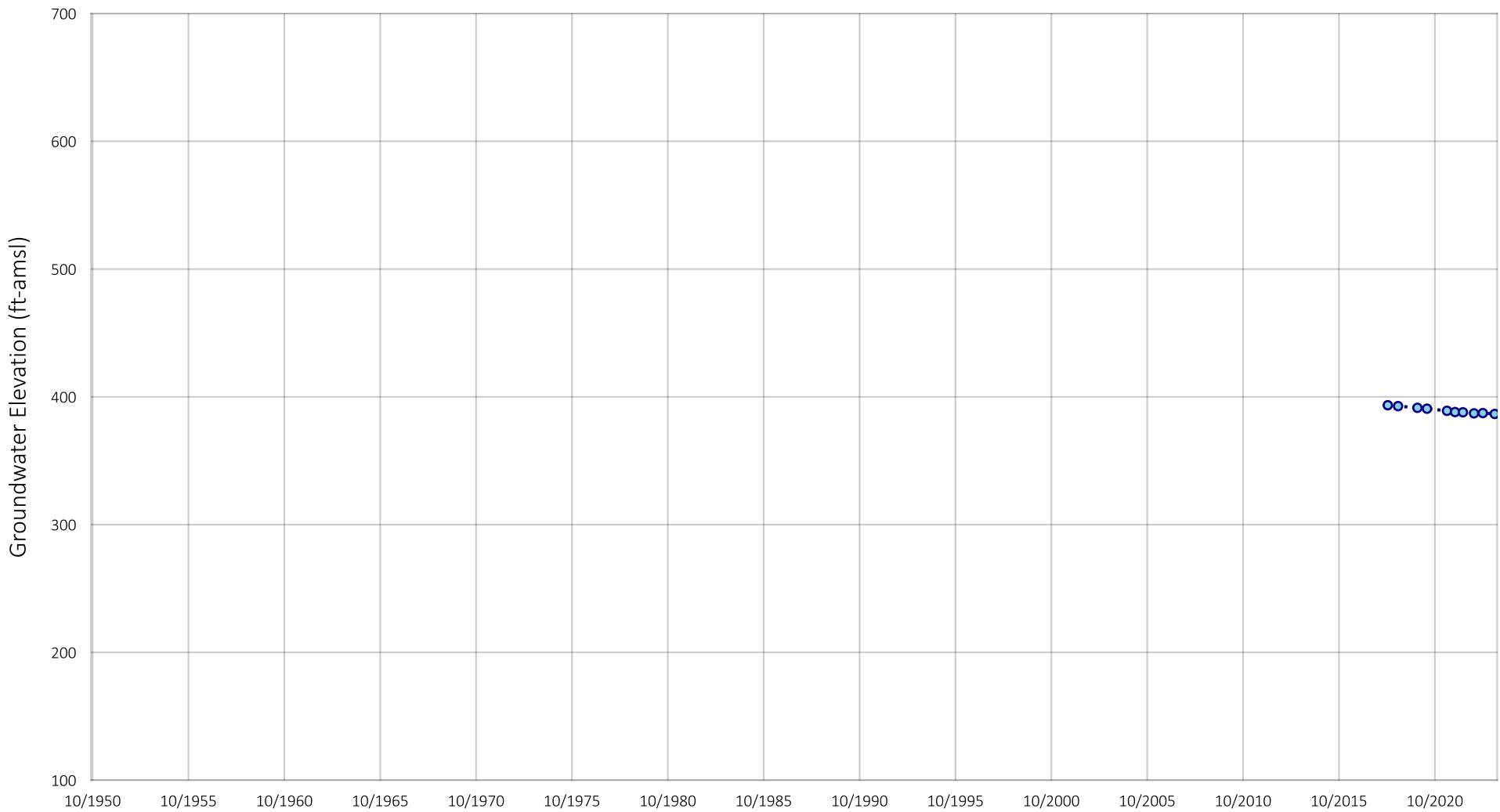


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245888  
Well Name: ID4-3  
State Well ID: 010S006E18R001S

Figure F-8



### Location of Well in Borrego Springs

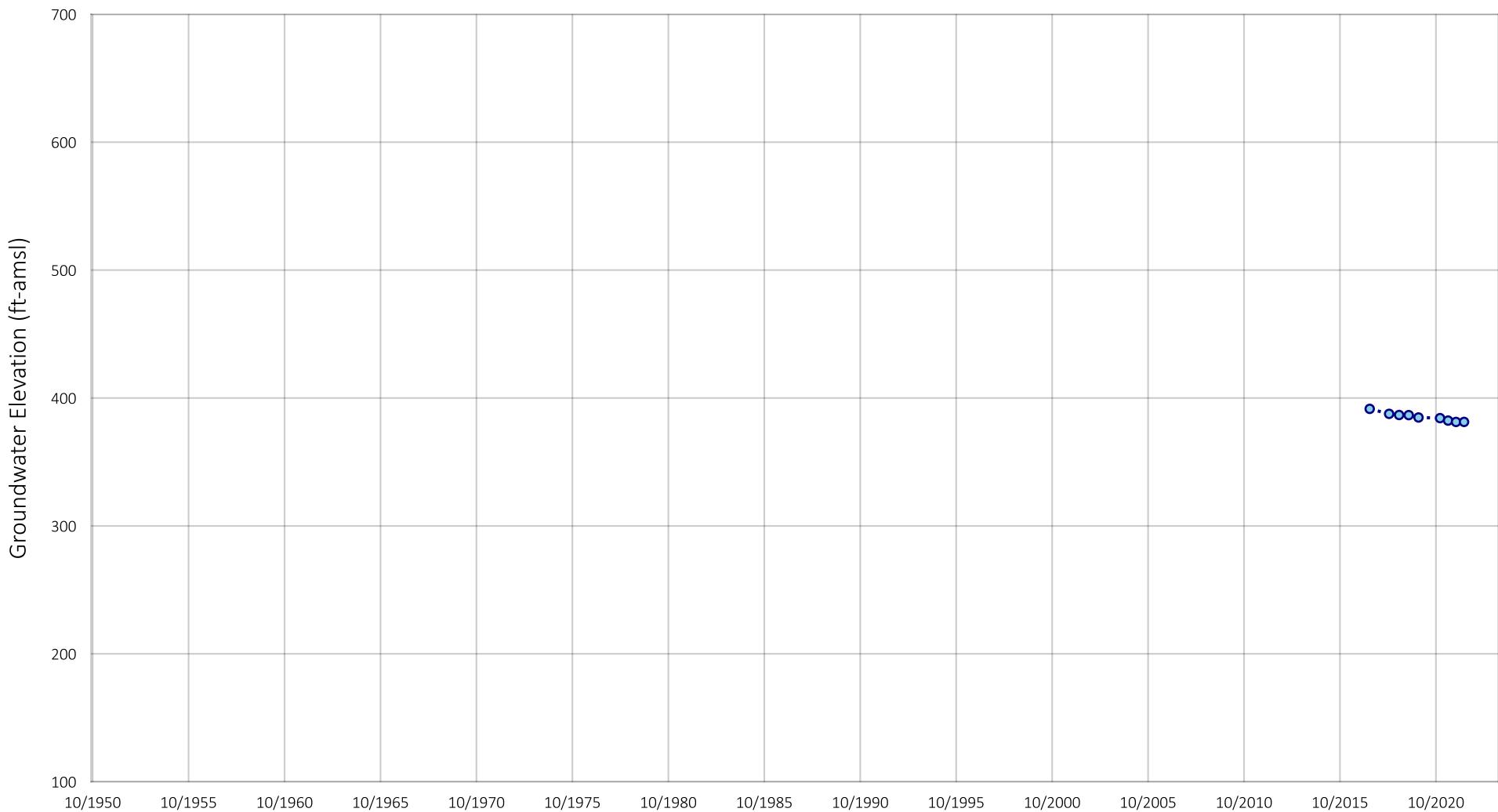


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245868  
Well Name: Evans  
State Well ID: 010S006E21E001S

Figure F-9



Location of Well in Borrego Springs

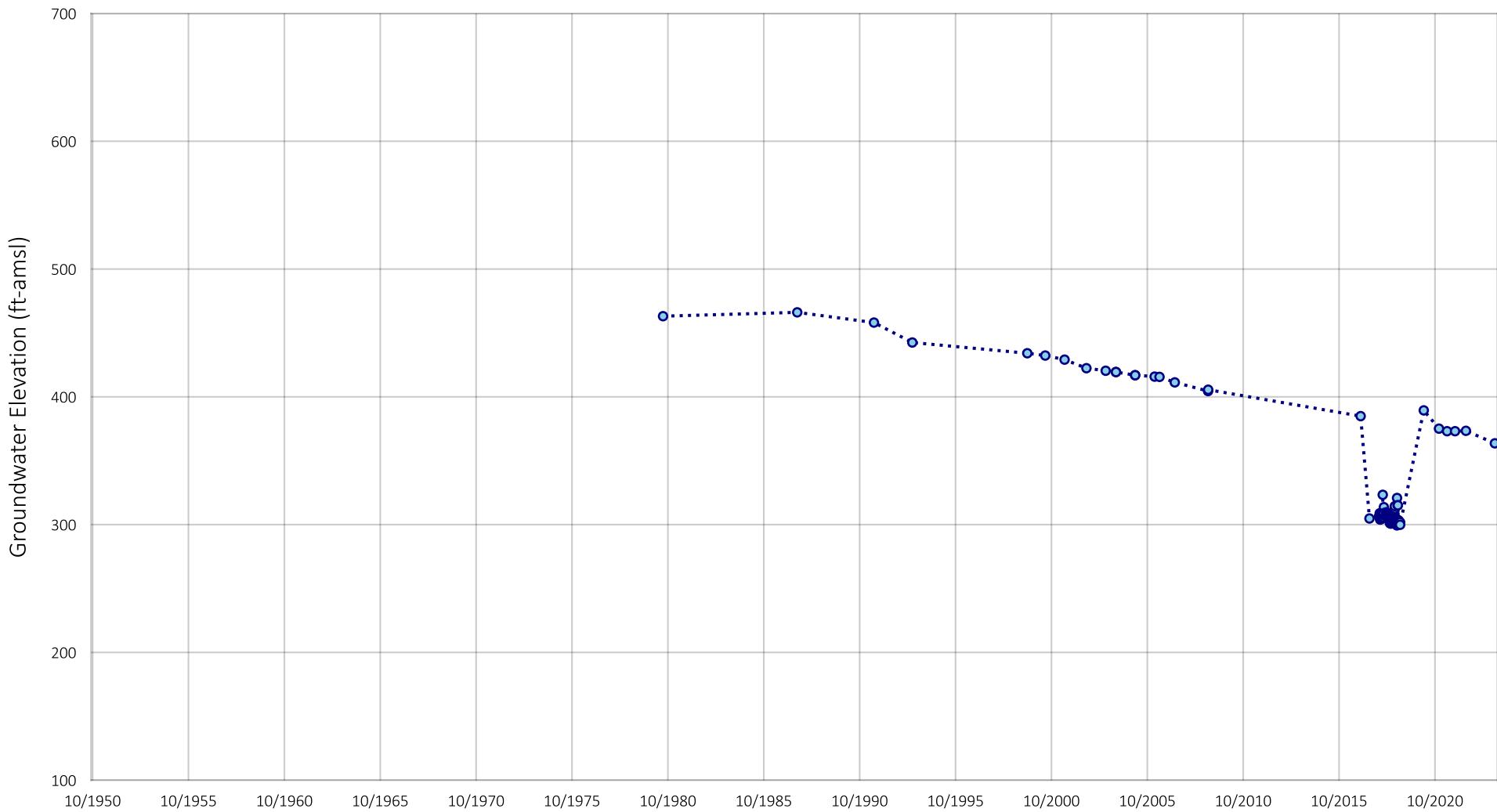


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245930  
Well Name: White Well  
State Well ID: 010S006E29A001S

Figure F-10



Location of Well in Borrego Springs

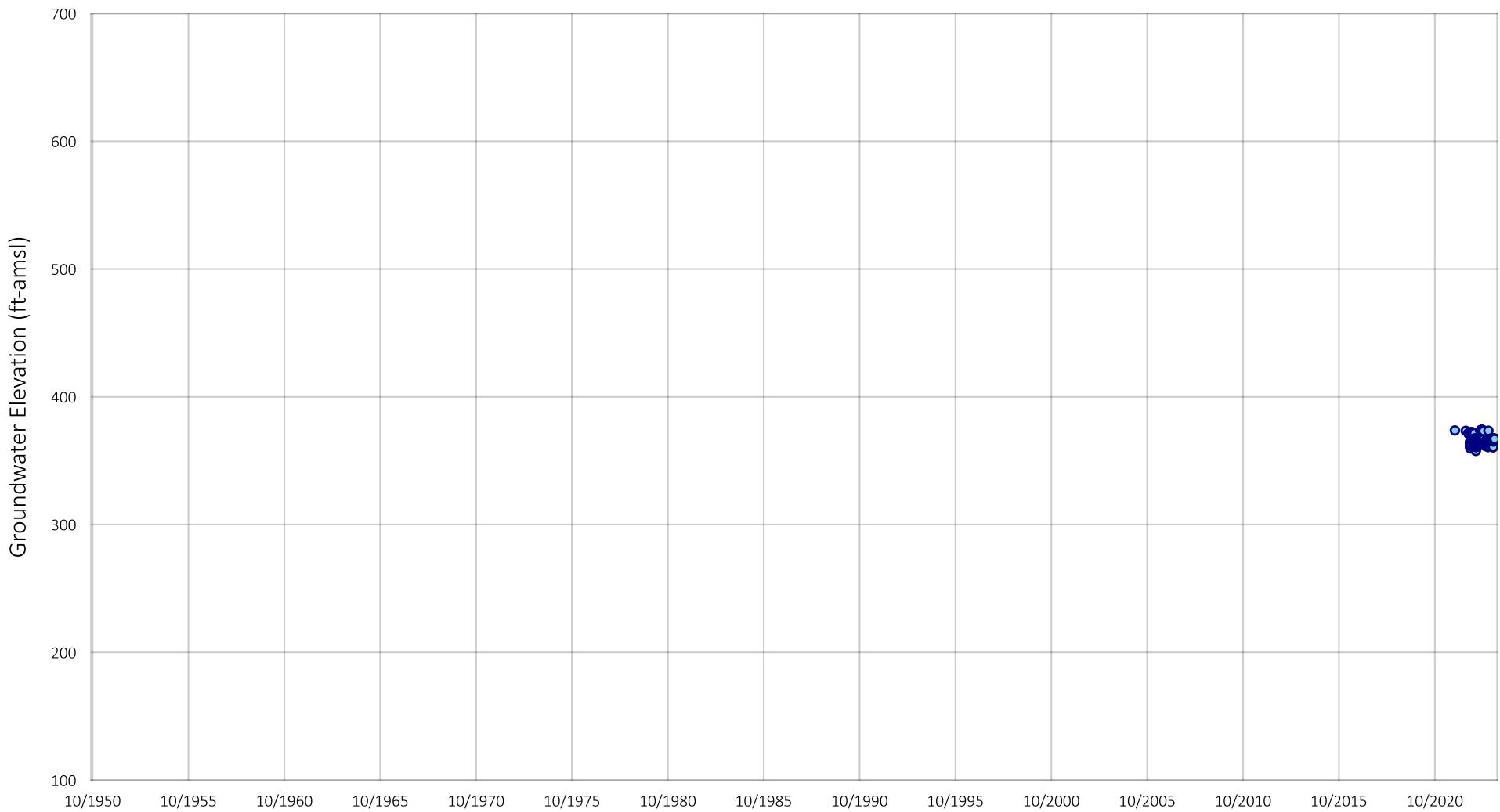


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245889  
Well Name: ID4-4  
State Well ID: 010S006E29K002S

Figure F-11



Location of Well in Borrego Springs

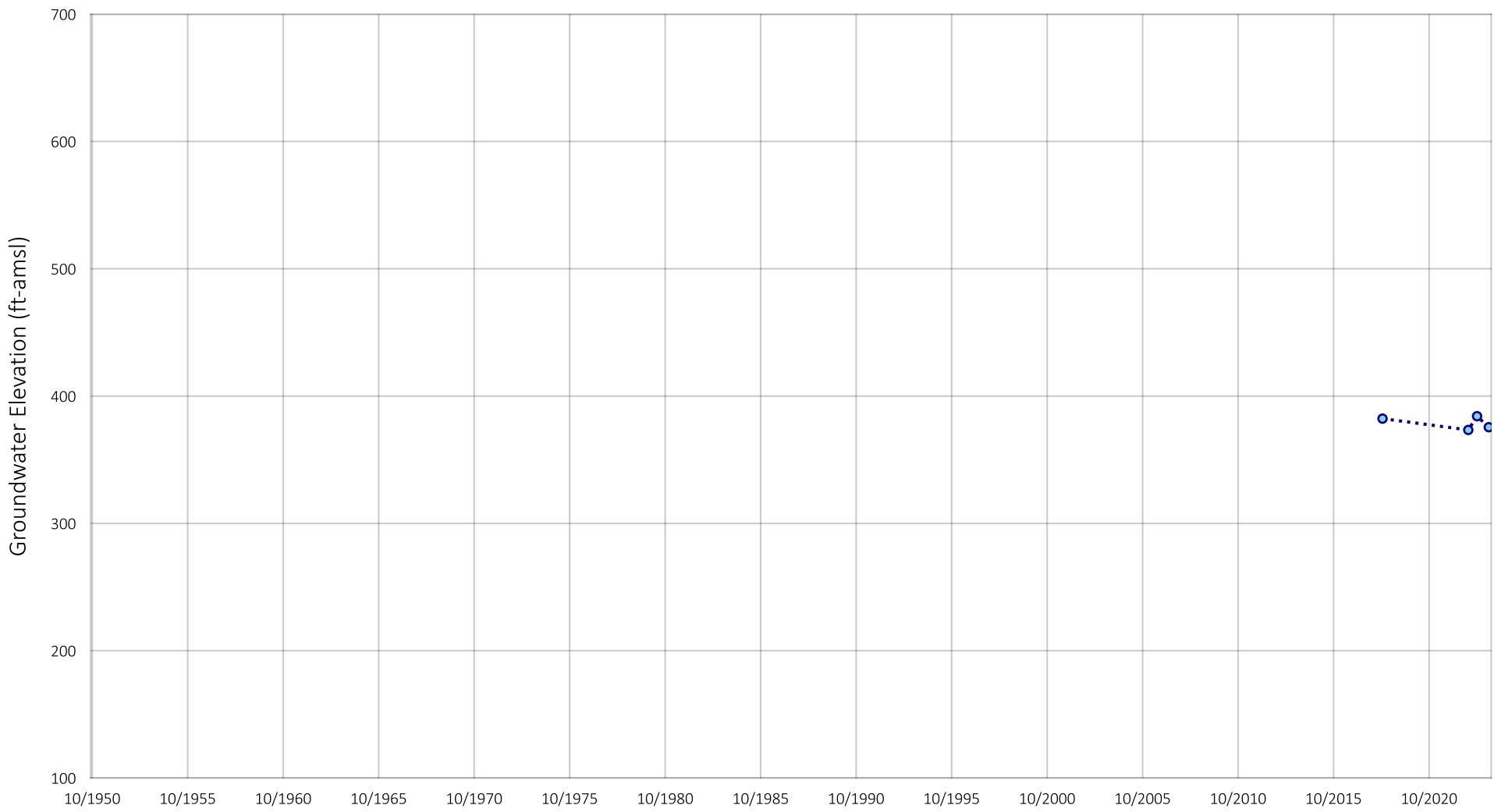


Prepared by:

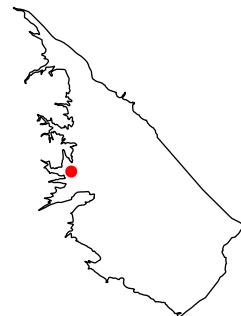


Historical Groundwater Level Elevation  
BSWM ID: 1245891  
Well Name: ID4-9  
State Well ID: 10S006E29K003S

Figure F-12



Location of Well in Borrego Springs

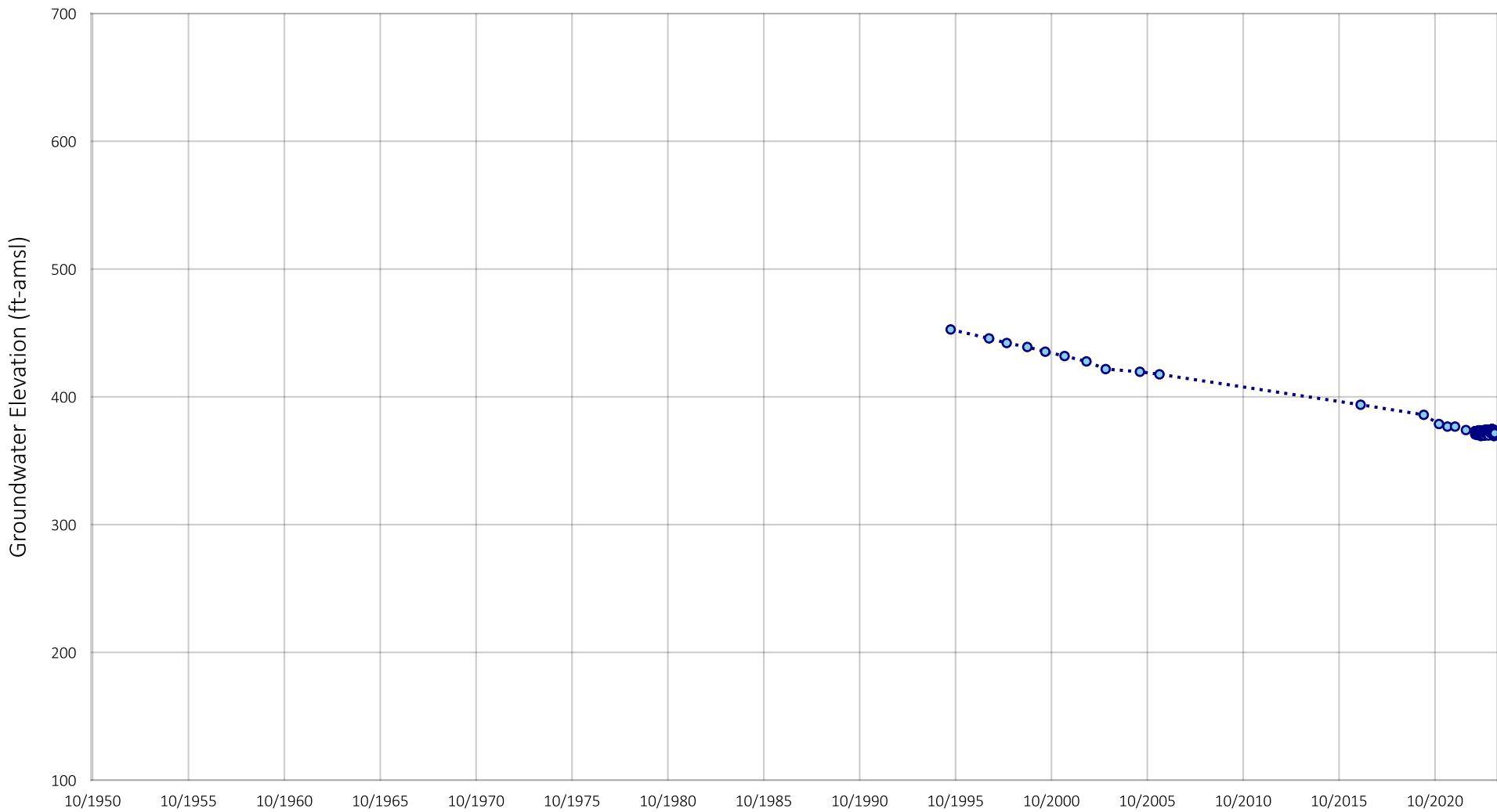


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245924  
Well Name: Auxiliary 3  
State Well ID: 010S005E25R002S

Figure F-13



Location of Well in Borrego Springs

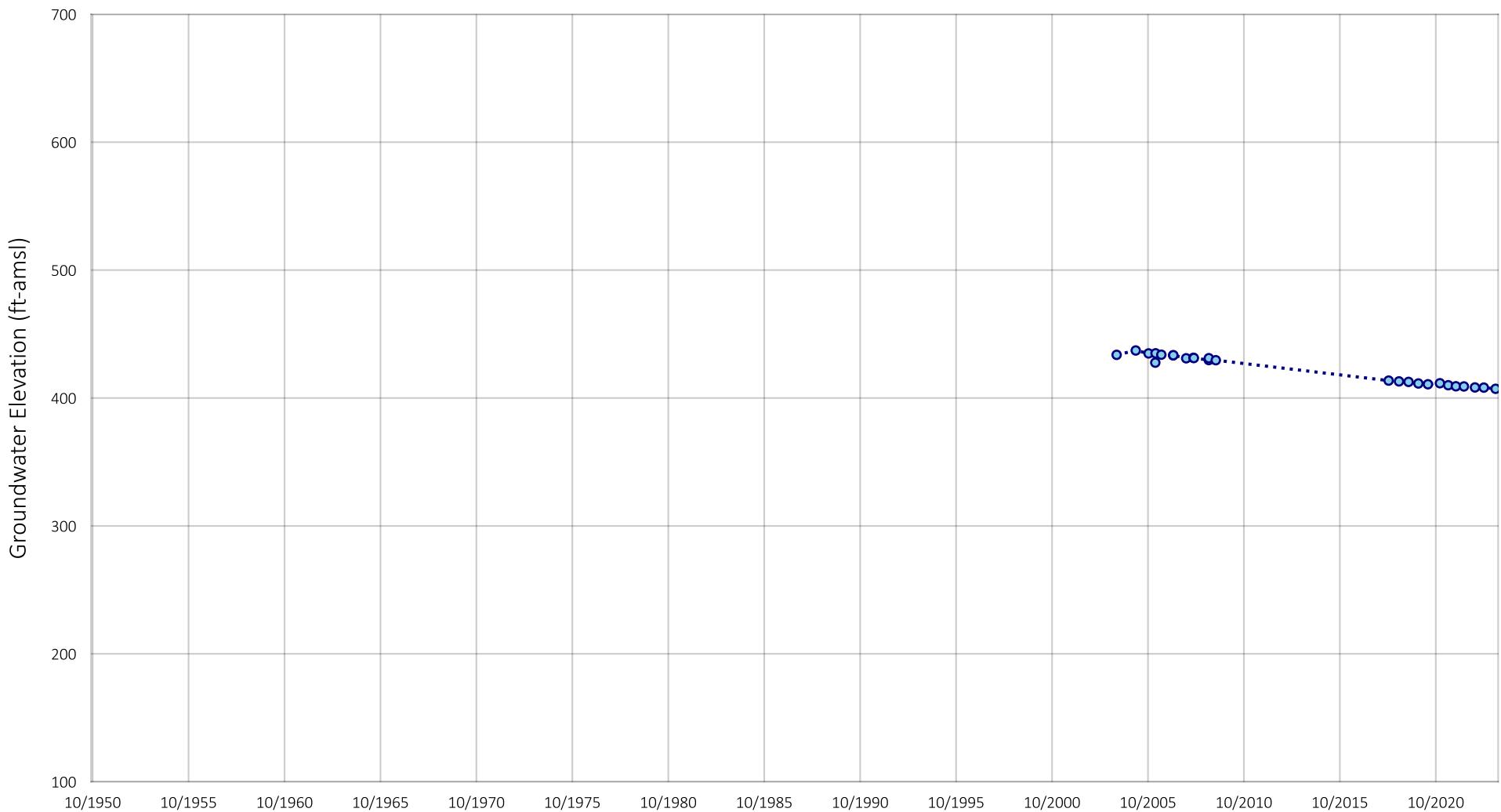


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245885  
Well Name: ID4-11  
State Well ID: 010S006E32D001S

Figure F-14



Location of Well in Borrego Springs

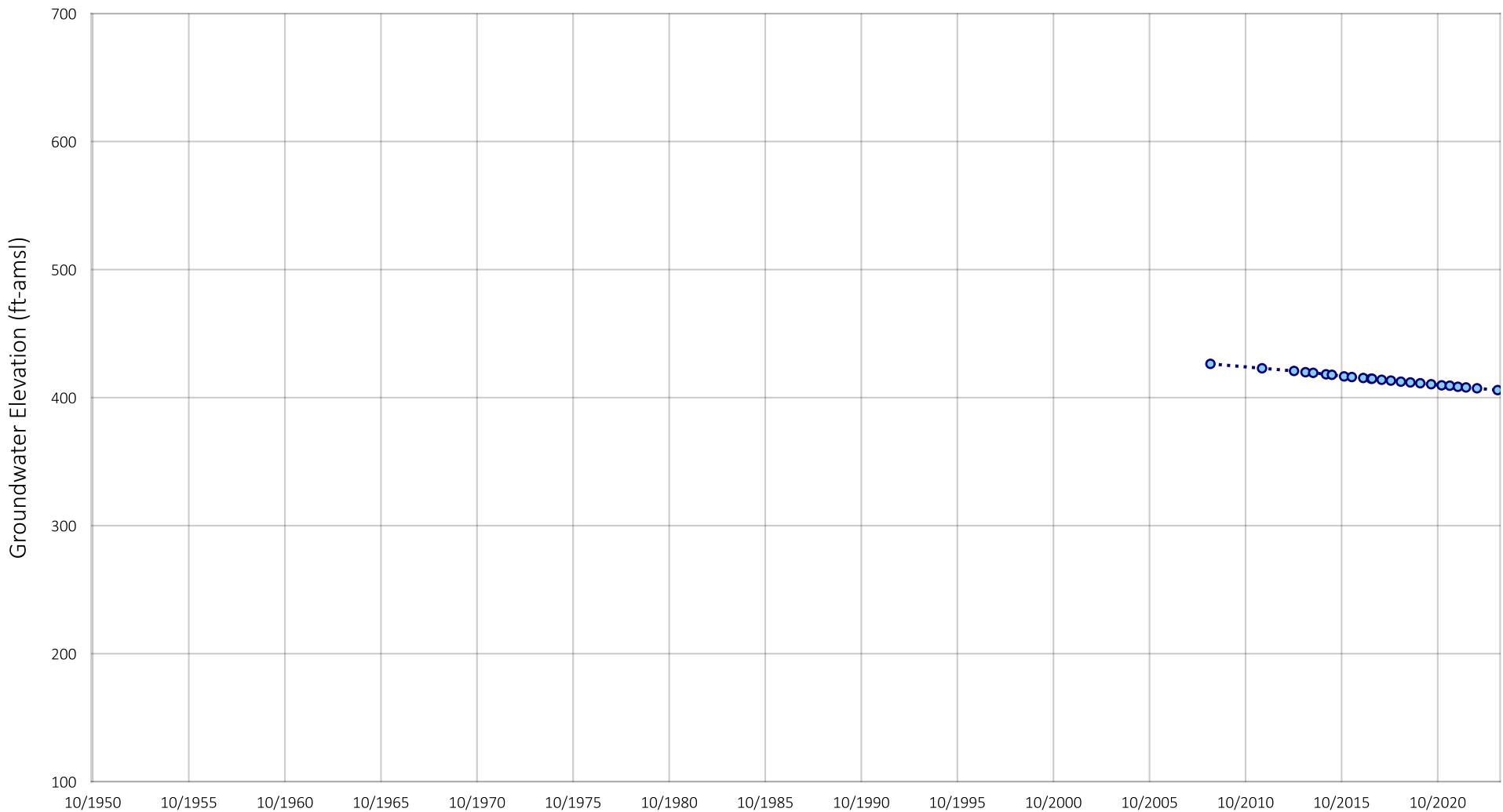


Prepared by:

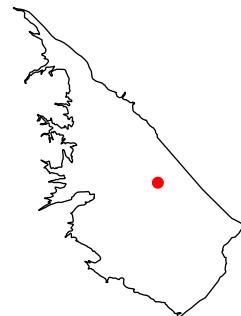


Historical Groundwater Level Elevation  
BSWM ID: 1245904  
Well Name: Palleson  
State Well ID: 010S006E33J001S

Figure F-15



Location of Well in Borrego Springs

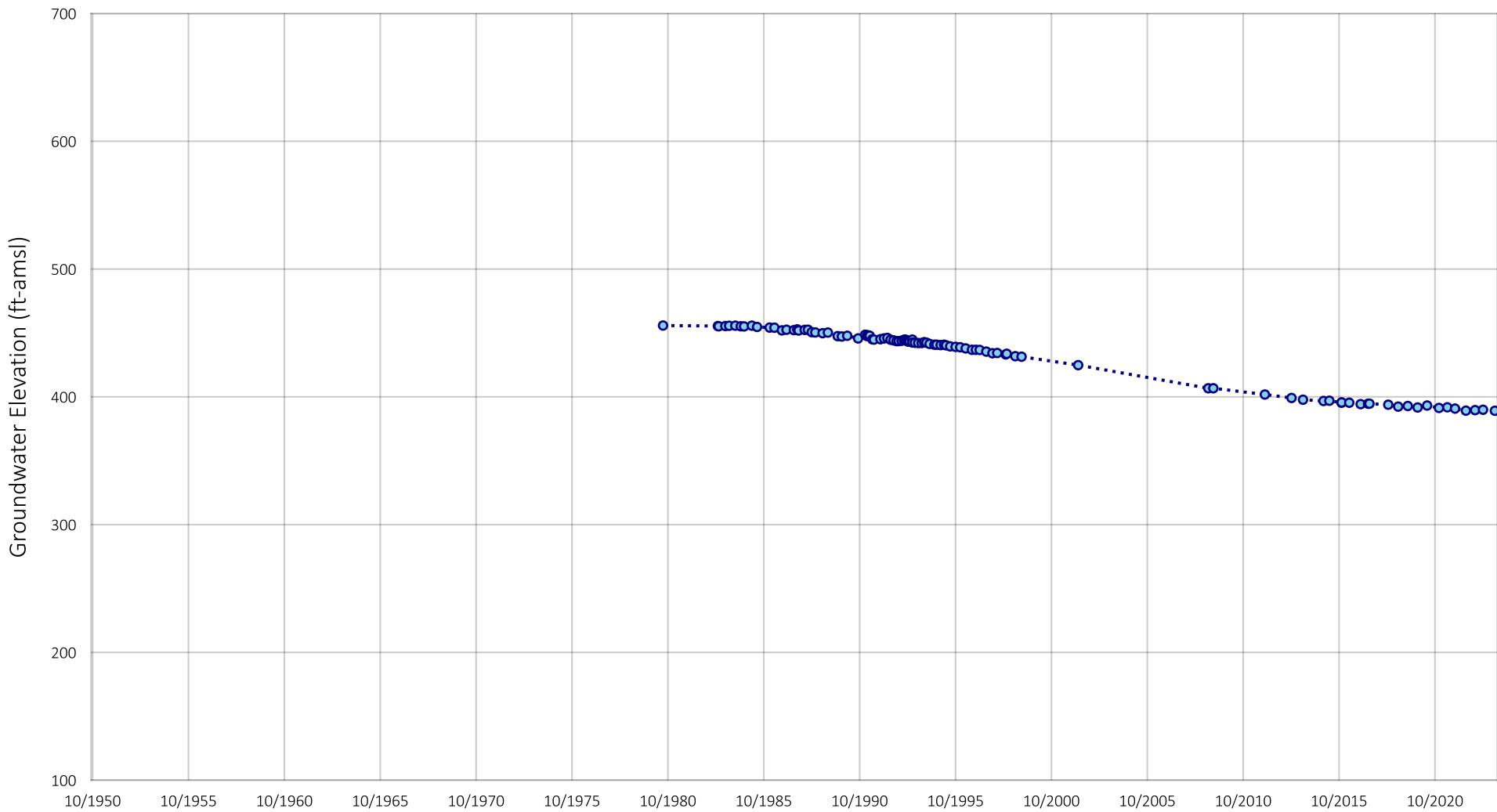


Prepared by:

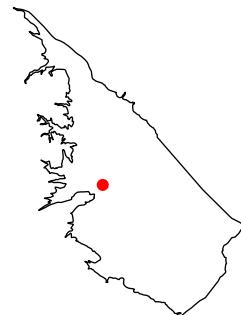


Historical Groundwater Level Elevation  
BSWM ID: 1245899  
Well Name: MW-4  
State Well ID: 010S006E35Q001S

Figure F-16



Location of Well in Borrego Springs

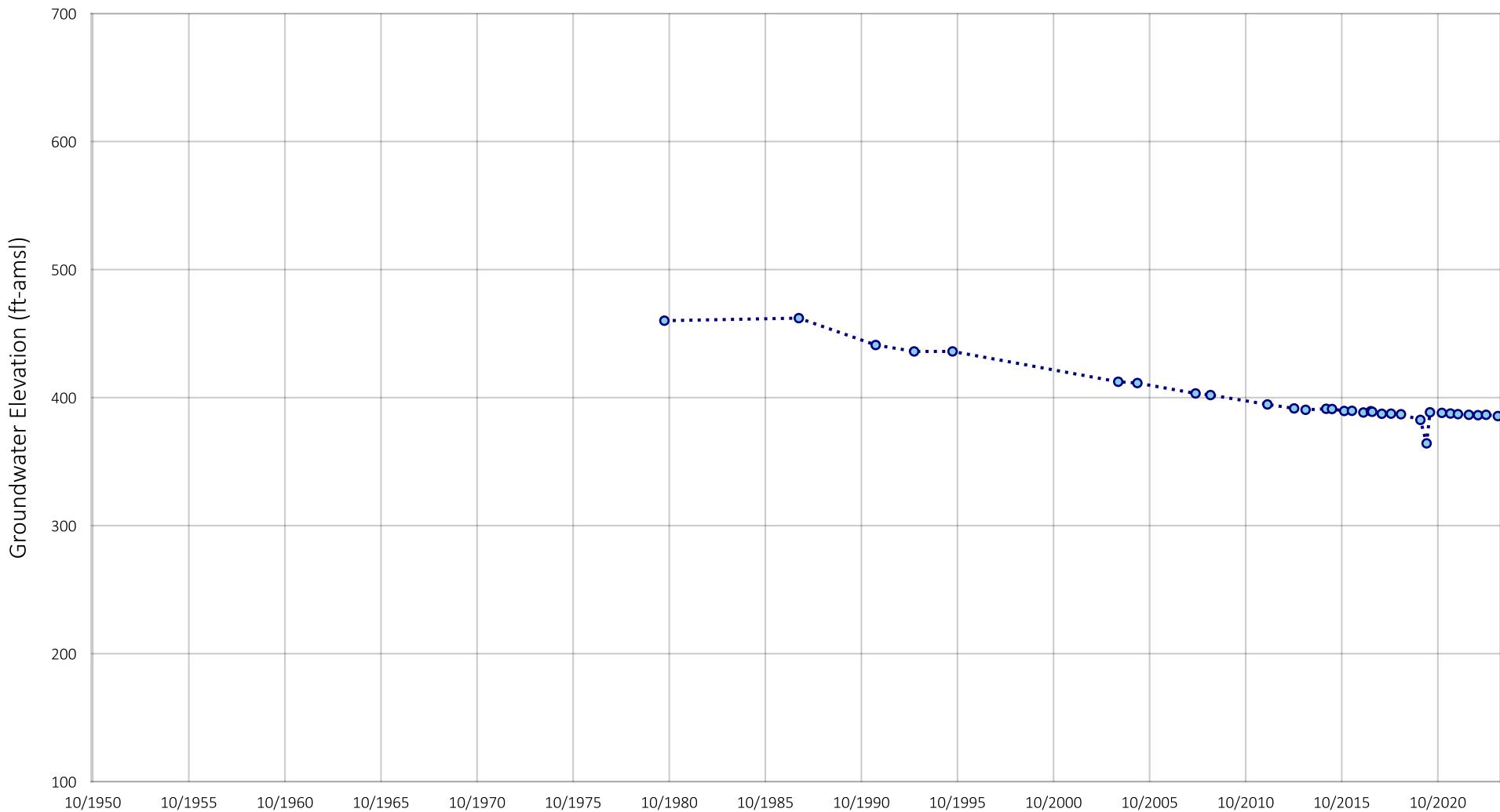


Prepared by:

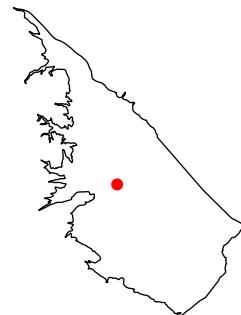


Historical Groundwater Level Elevation  
BSWM ID: 1245883  
Well Name: ID4-1  
State Well ID: 010S006E32R001S

Figure F-17



Location of Well in Borrego Springs

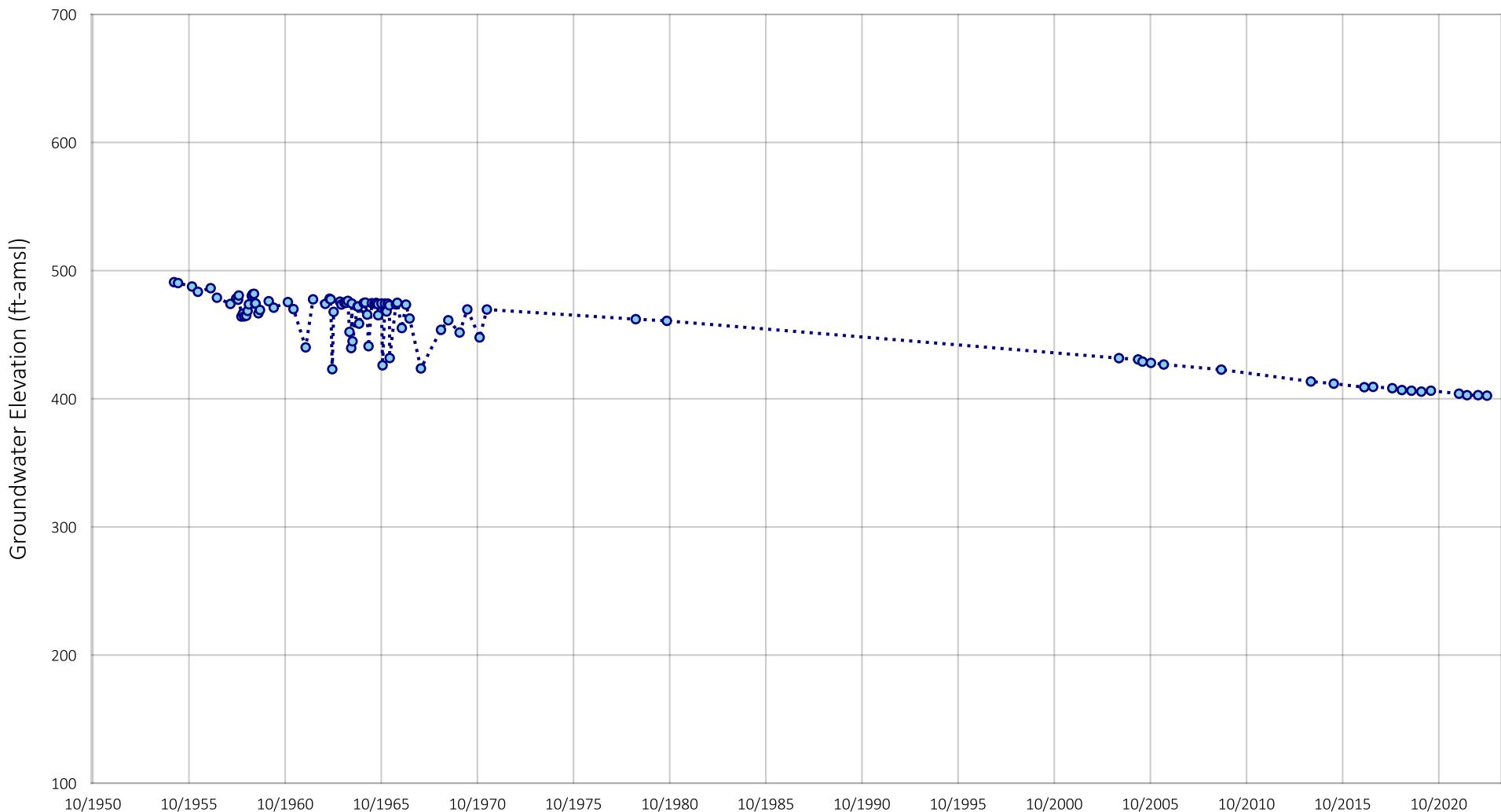


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245890  
Well Name: ID4-5  
State Well ID: 010S006E33Q001S

Figure F-18



Location of Well in Borrego Springs

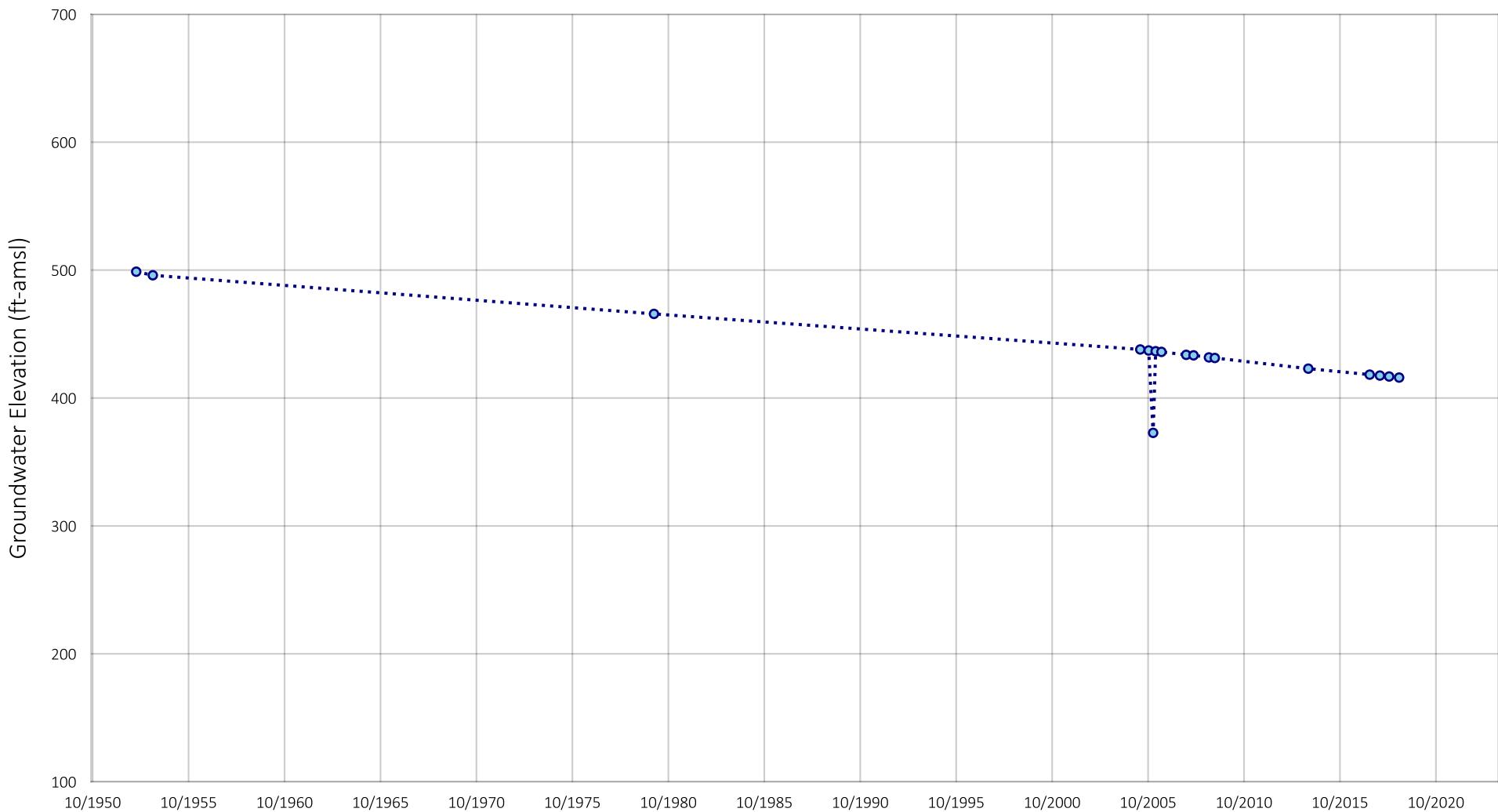


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245851  
Well Name: Airport 2  
State Well ID: 010S006E35N001S

Figure F-19



Location of Well in Borrego Springs

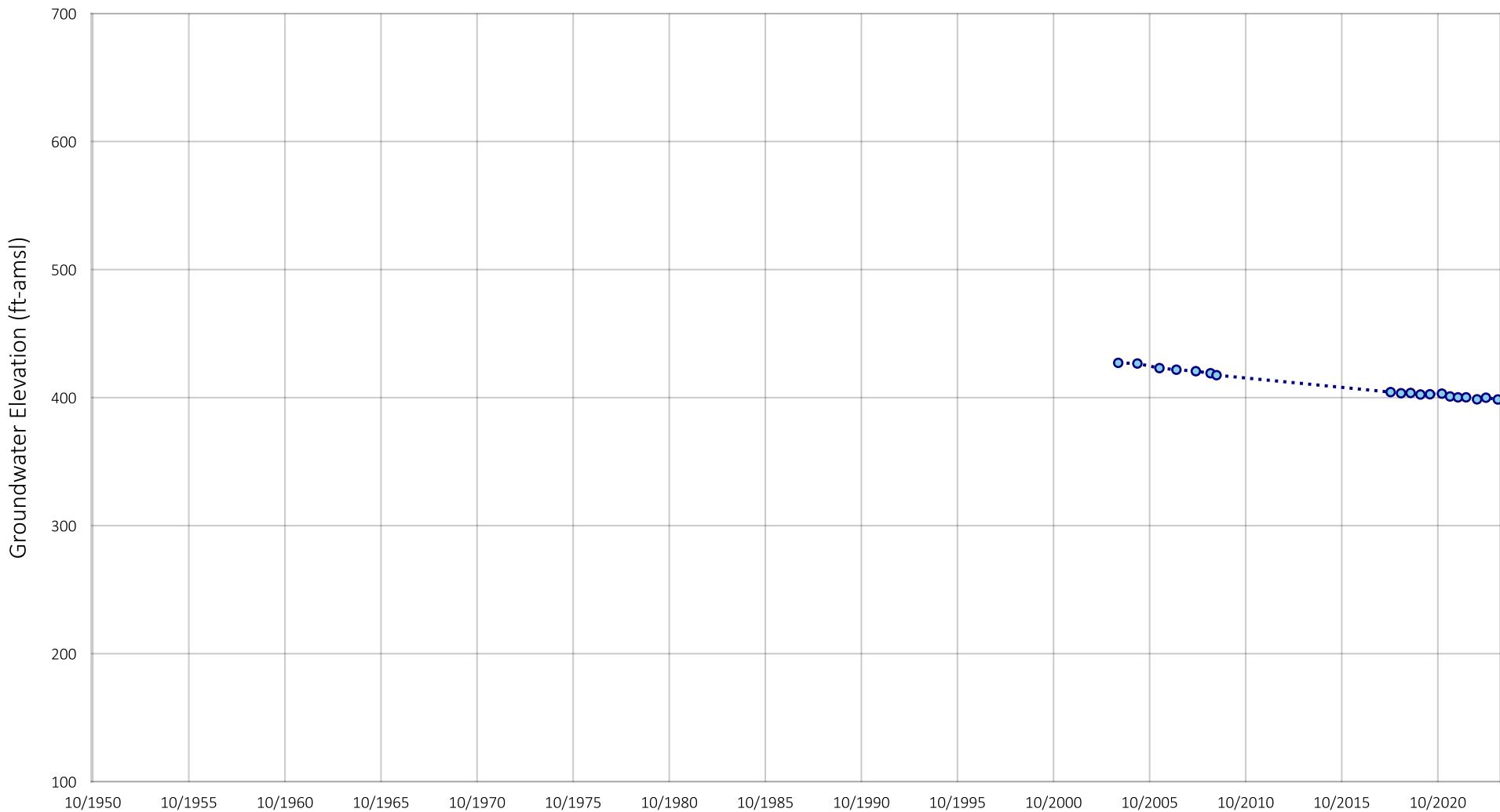


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245870  
Well Name: Gabrych #2  
State Well ID: 011S006E01C001S

Figure F-20



Location of Well in Borrego Springs

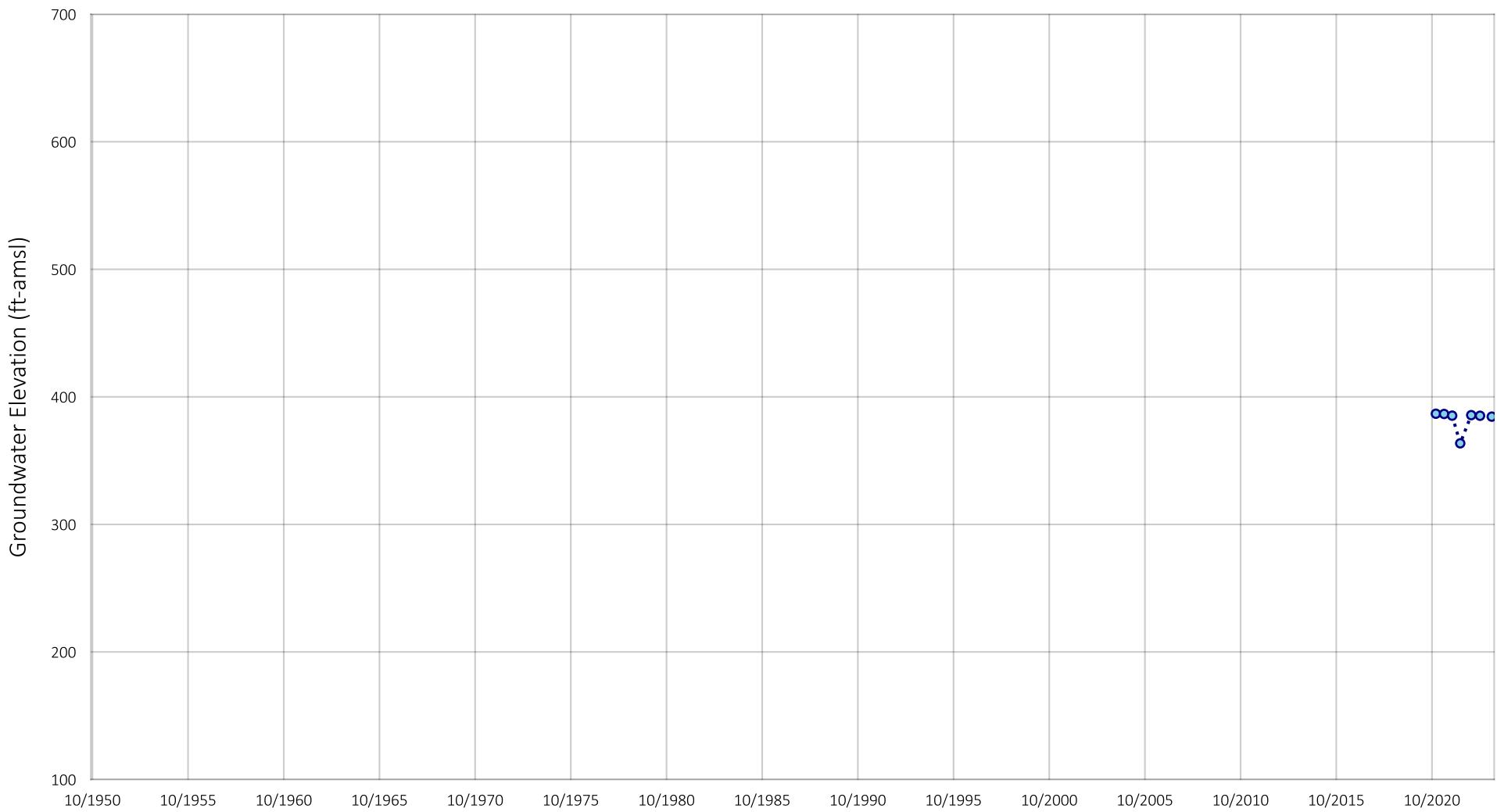


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245862  
Well Name: Cameron 2  
State Well ID: 011S006E04F001S

Figure F-21



Location of Well in Borrego Springs

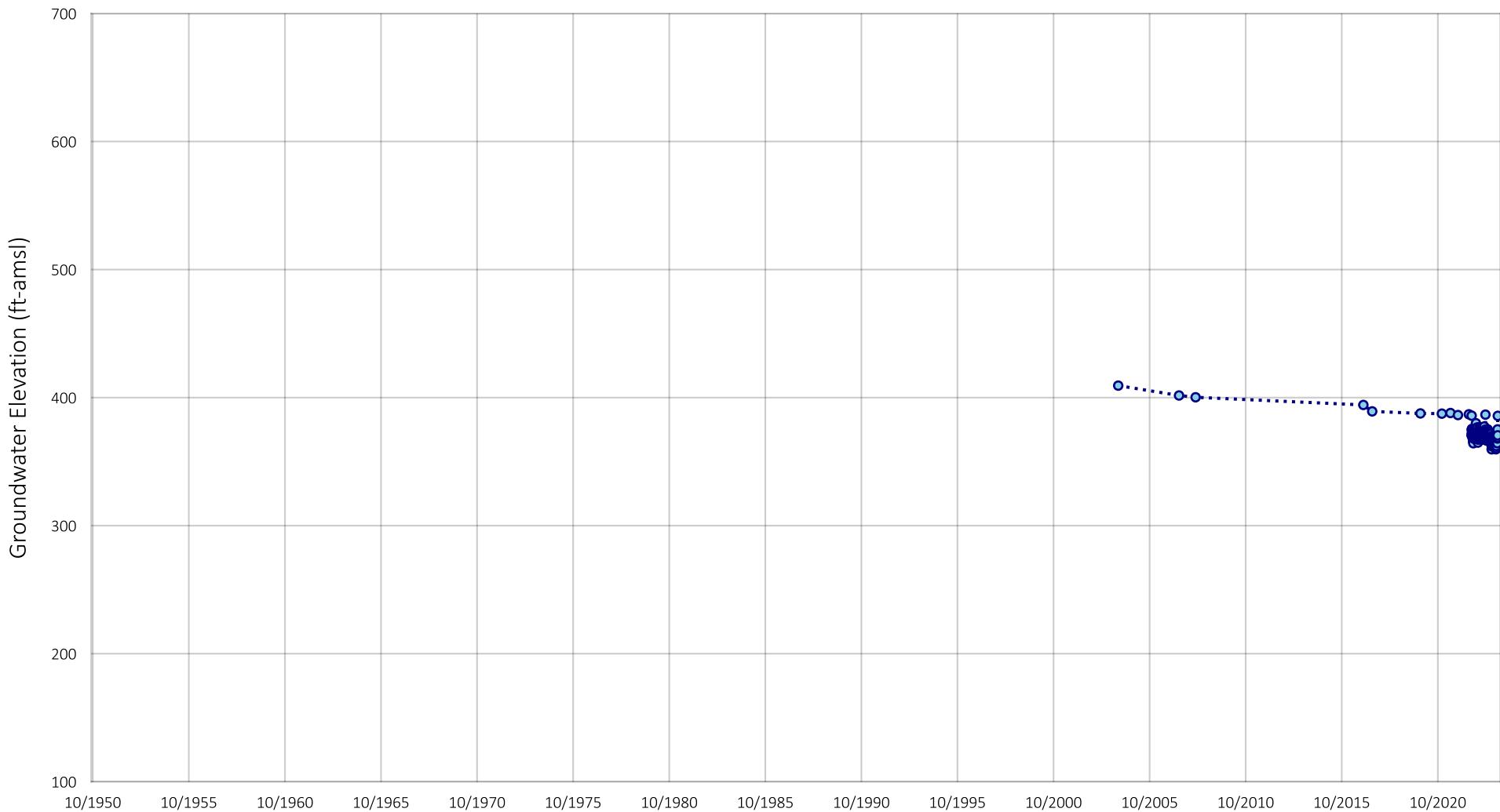


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245860  
Well Name: BSR Well 6  
State Well ID: 011S006E09B002S

Figure F-22



Location of Well in Borrego Springs

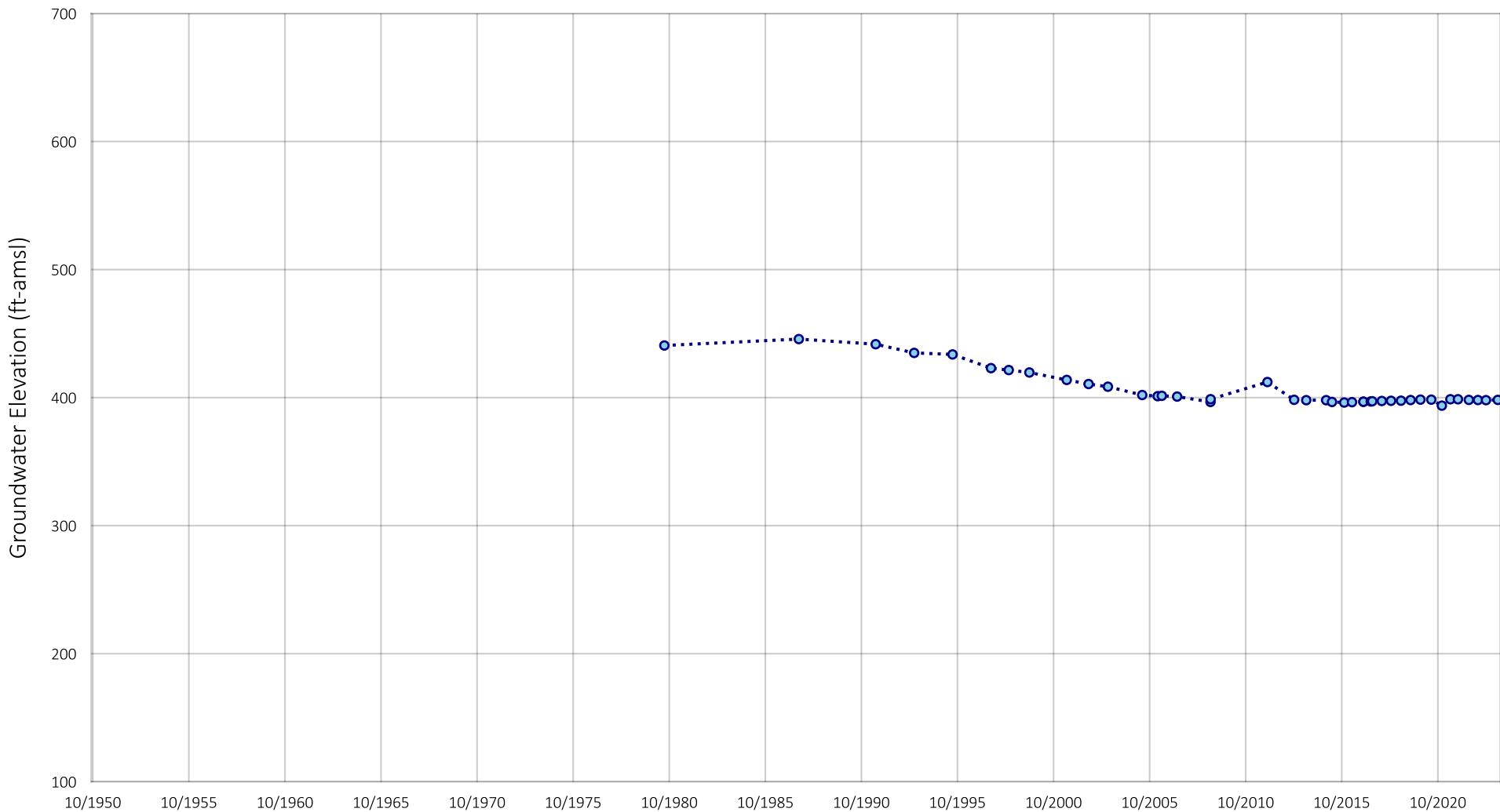


Prepared by:

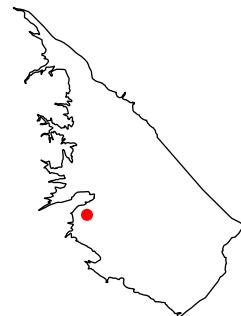


Historical Groundwater Level Elevation  
BSWM ID: 1245893  
Well Name: ID5-5  
State Well ID: 011S006E09E001S

Figure F-23



Location of Well in Borrego Springs

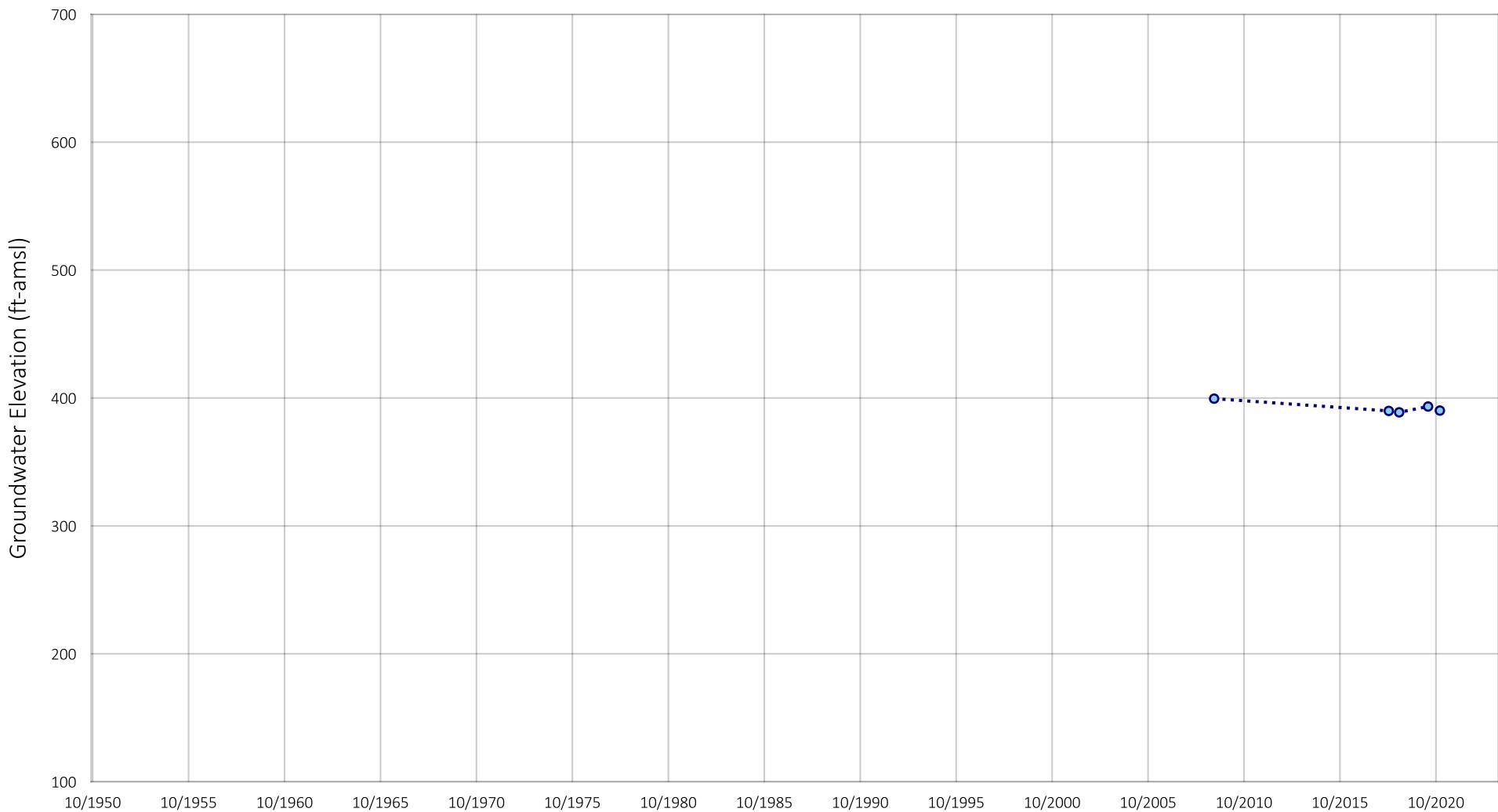


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245887  
Well Name: ID4-2  
State Well ID: 011S006E07K003S

Figure F-24



Location of Well in Borrego Springs

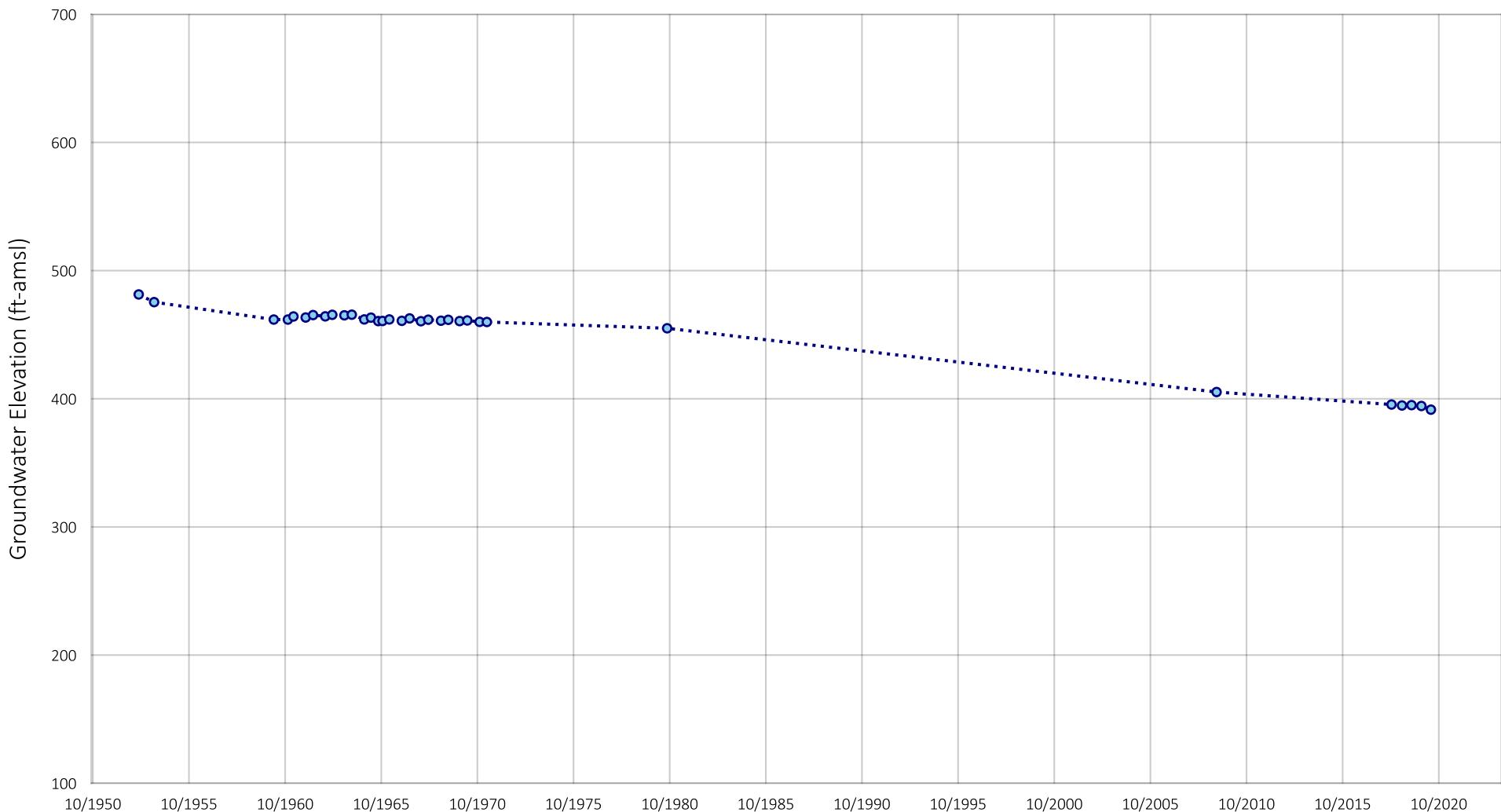


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245850  
Well Name: Abandoned Motel-2  
State Well ID: 011S006E10N004S

Figure F-25



Location of Well in Borrego Springs

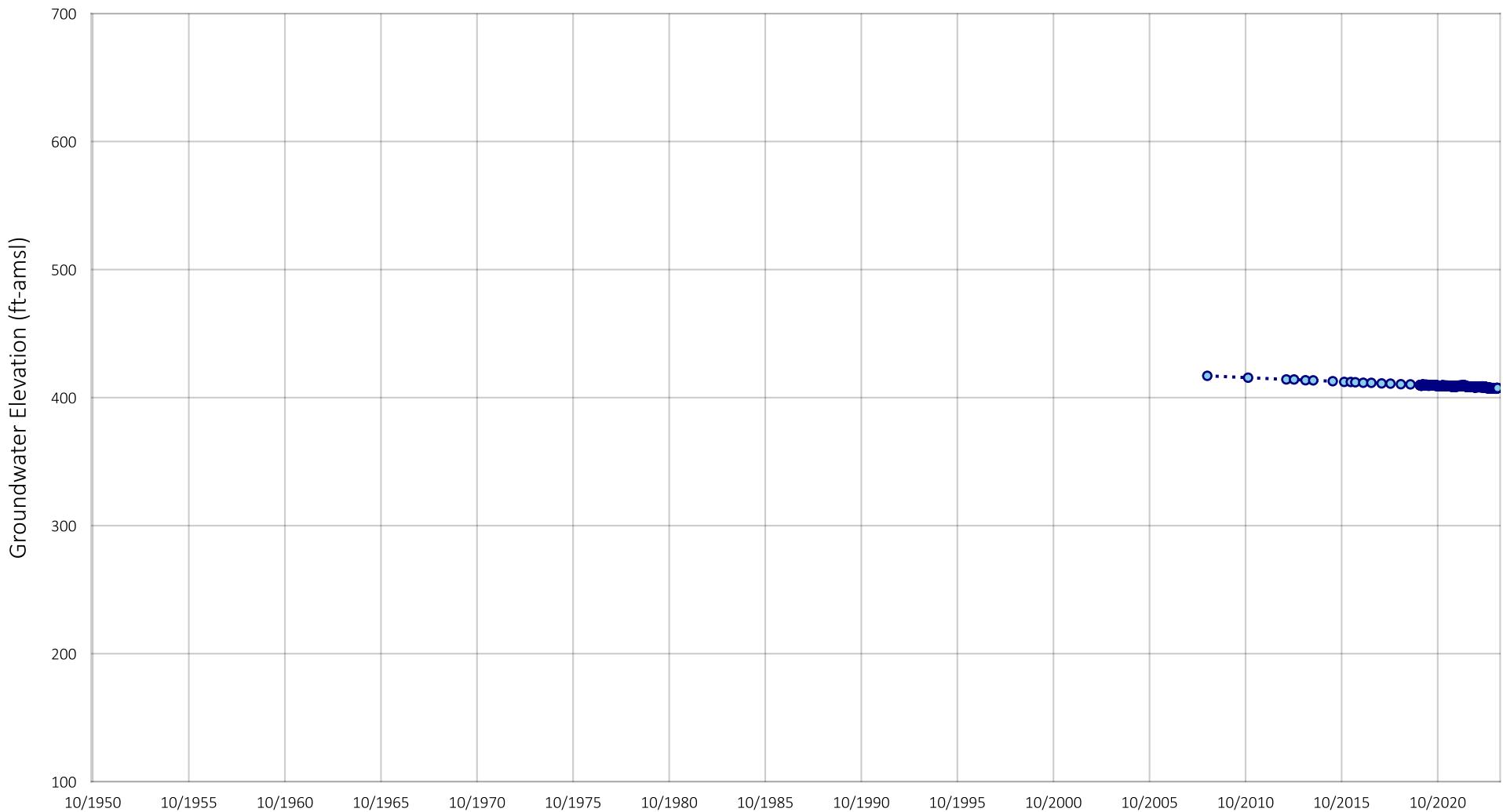


Prepared by:

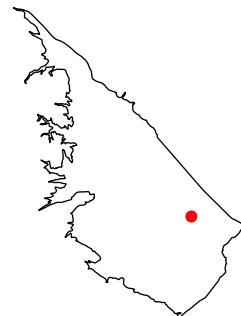


Historical Groundwater Level Elevation  
BSWM ID: 1245849  
Well Name: Abandoned Motel-1  
State Well ID: 011S006E10N001S

Figure F-26



Location of Well in Borrego Springs

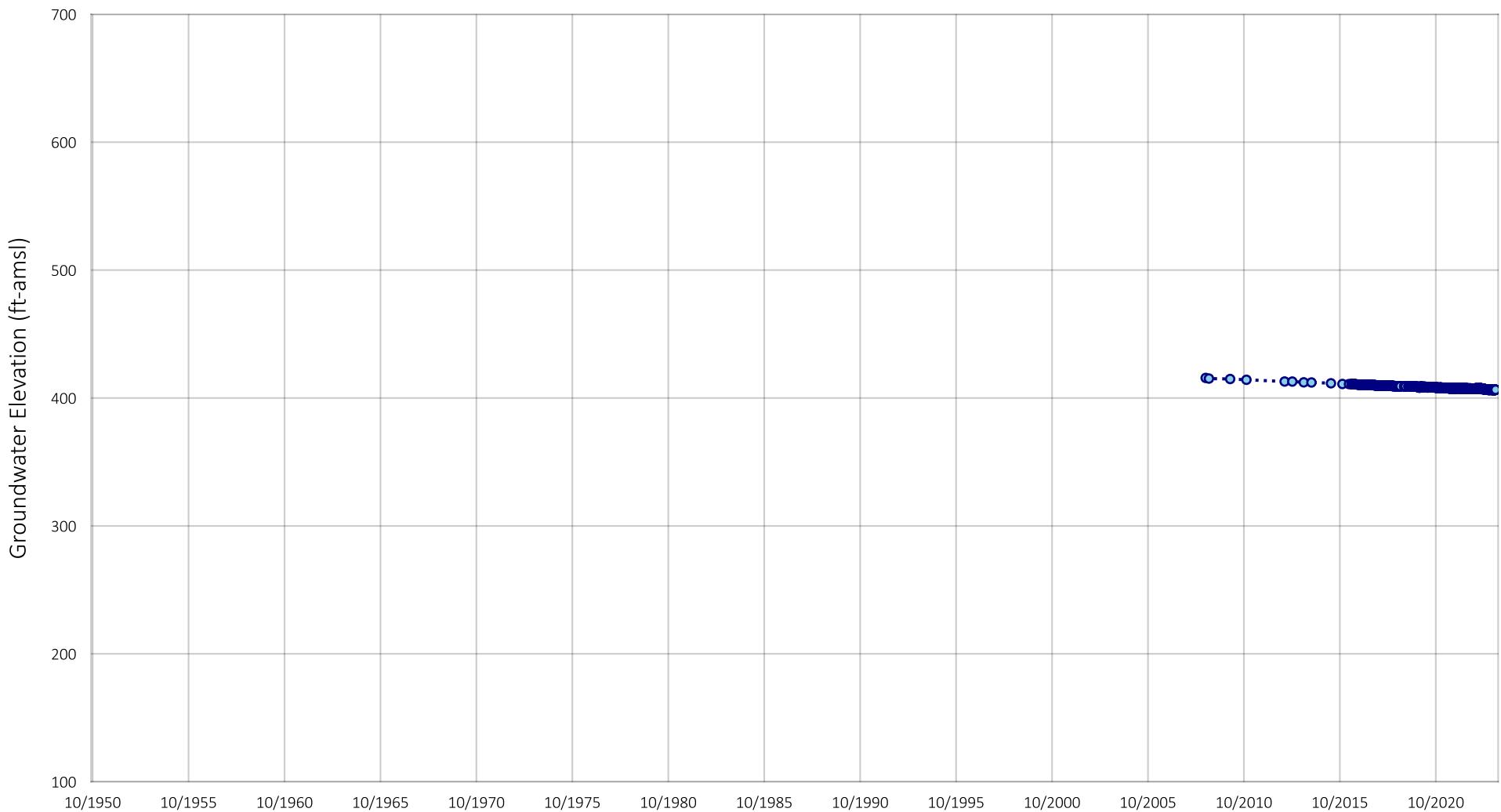


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245900  
Well Name: MW-5A (East-Lower)  
State Well ID: 011S007E07R001S

Figure F-27



Location of Well in Borrego Springs

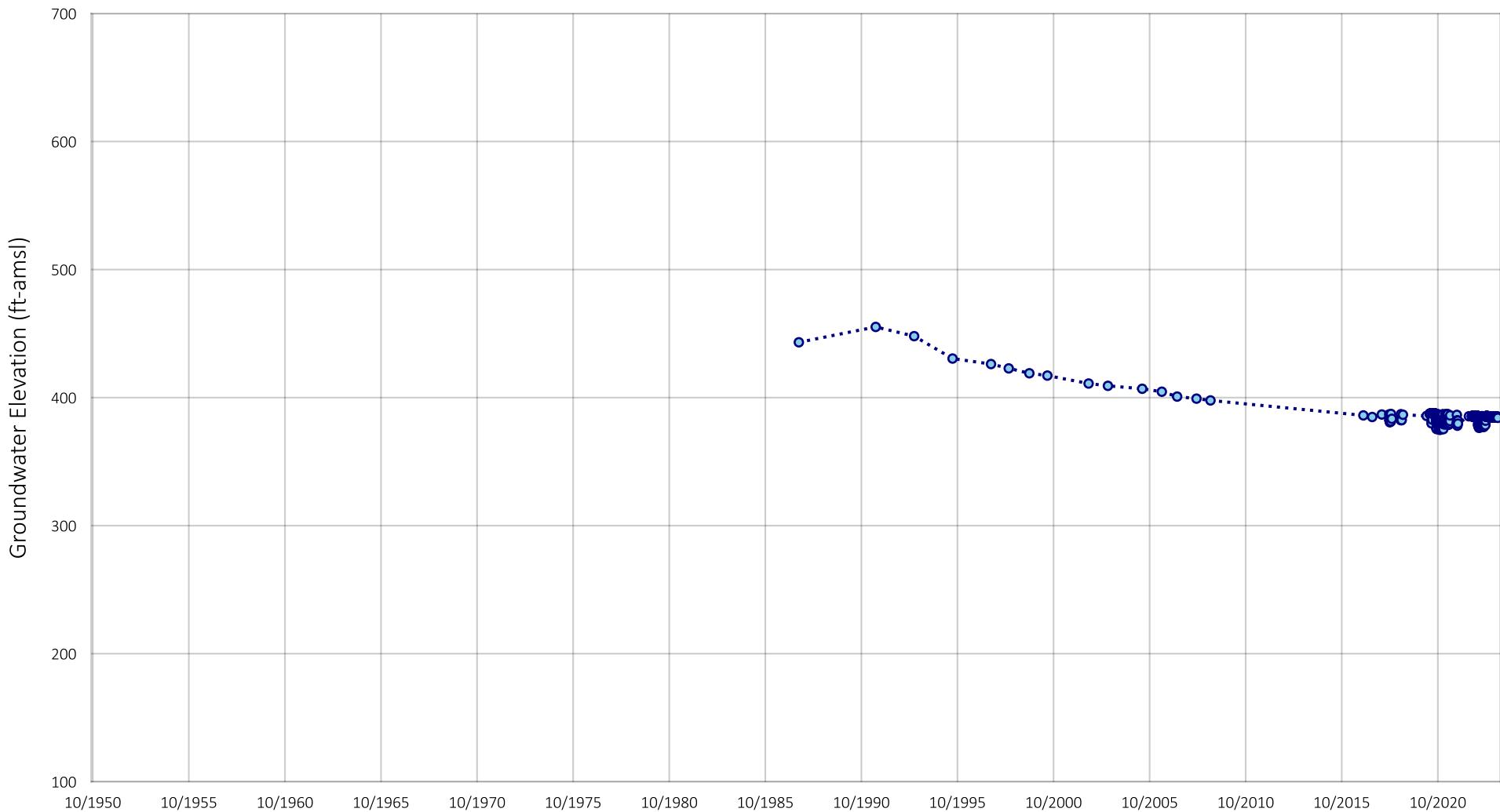


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245901  
Well Name: MW-5B (West-Upper)  
State Well ID: 011S007E07R002S

Figure F-28



Location of Well in Borrego Springs

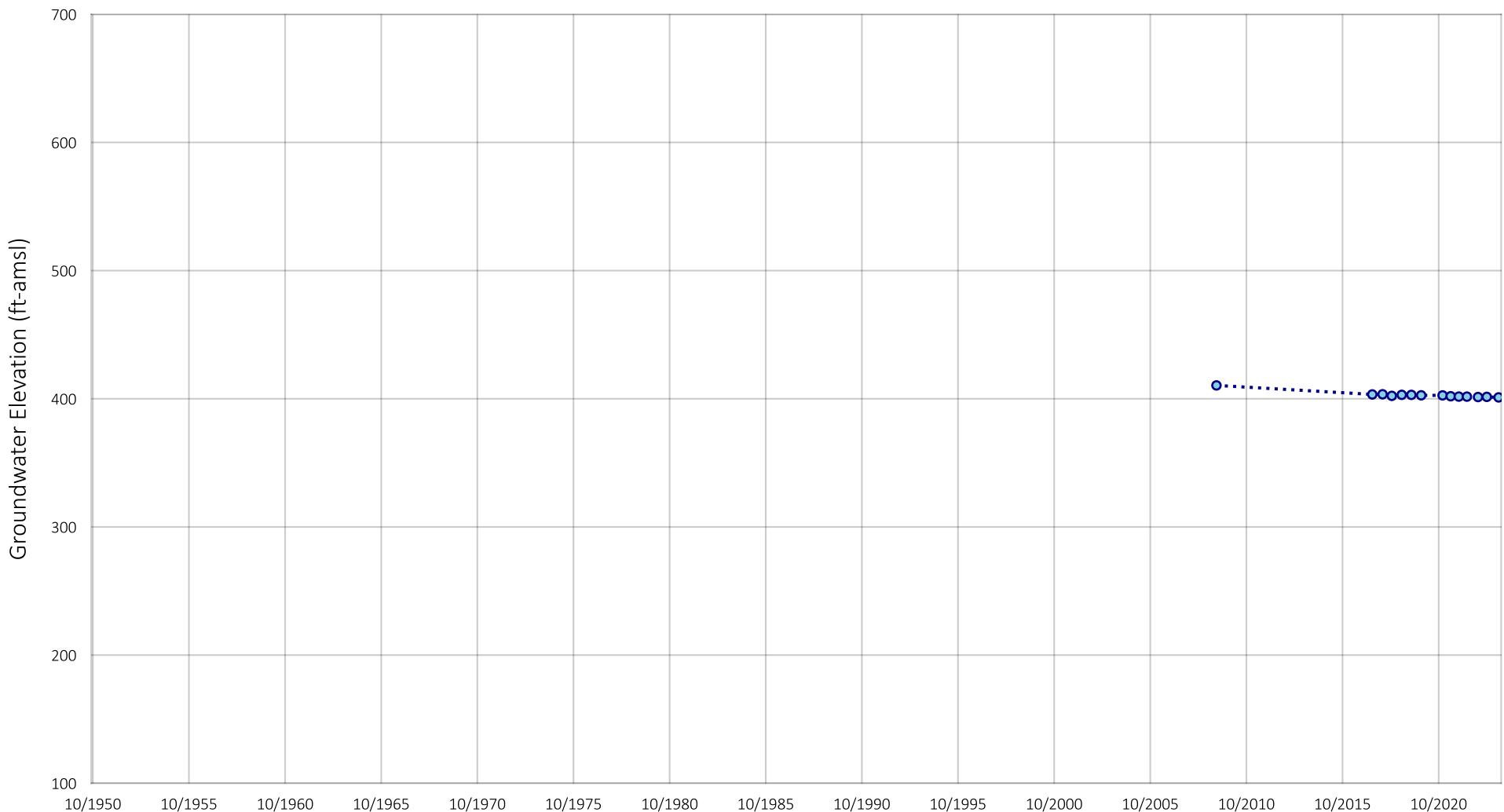


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245879  
Well Name: ID1-12  
State Well ID: 011S006E16A002S

Figure F-29



Location of Well in Borrego Springs

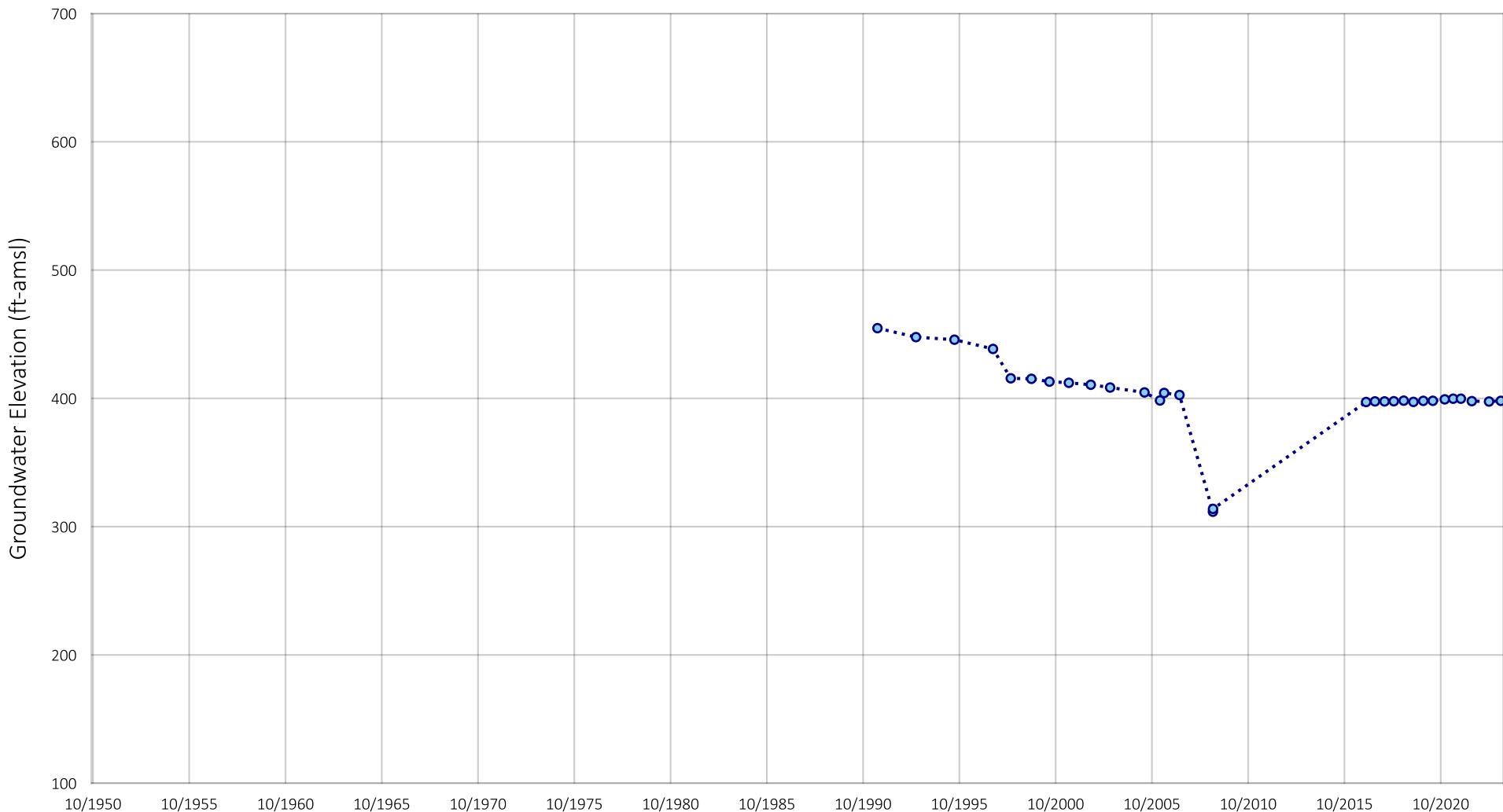


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245865  
Well Name: County Yard (SD DOT)  
State Well ID: 011S006E15G001S

Figure F-30



Location of Well in Borrego Springs

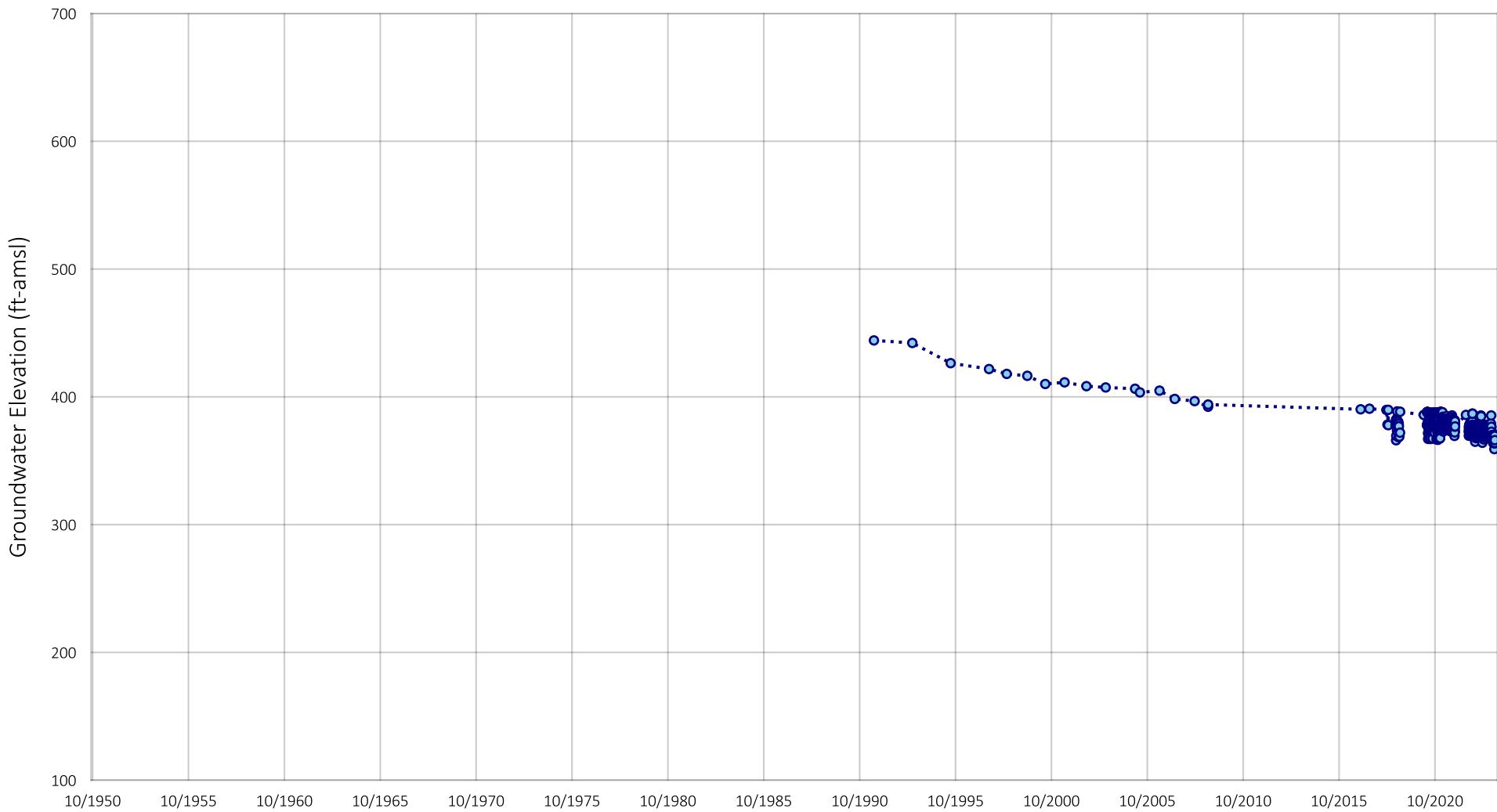


Prepared by:

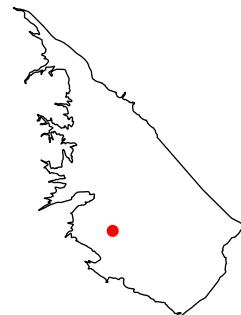


Historical Groundwater Level Elevation  
BSWM ID: 1245884  
Well Name: ID4-10  
State Well ID: 011S006E18L001S

Figure F-31



Location of Well in Borrego Springs

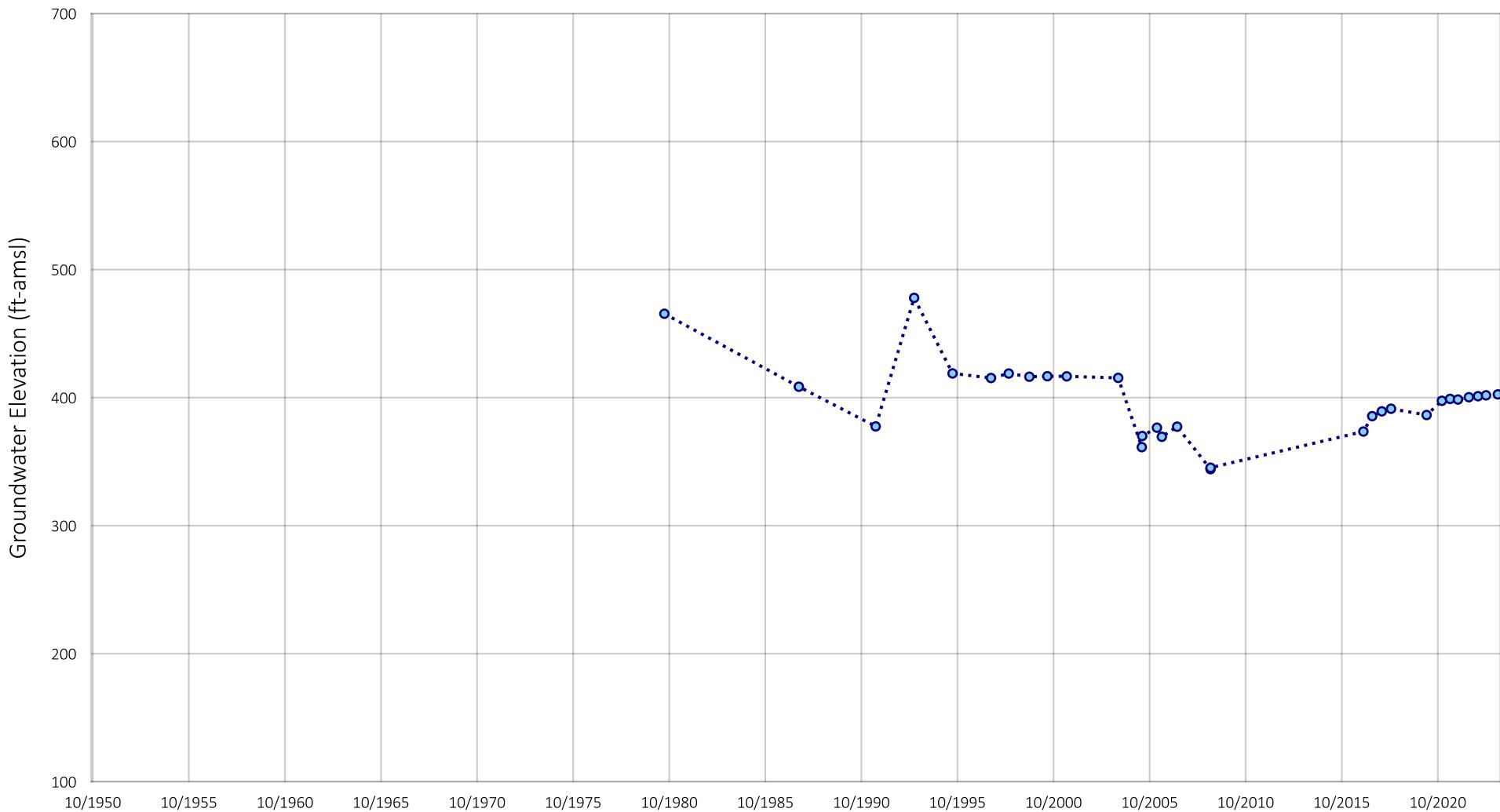


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245880  
Well Name: ID1-16  
State Well ID: 011S006E16N001S

Figure F-32



Location of Well in Borrego Springs

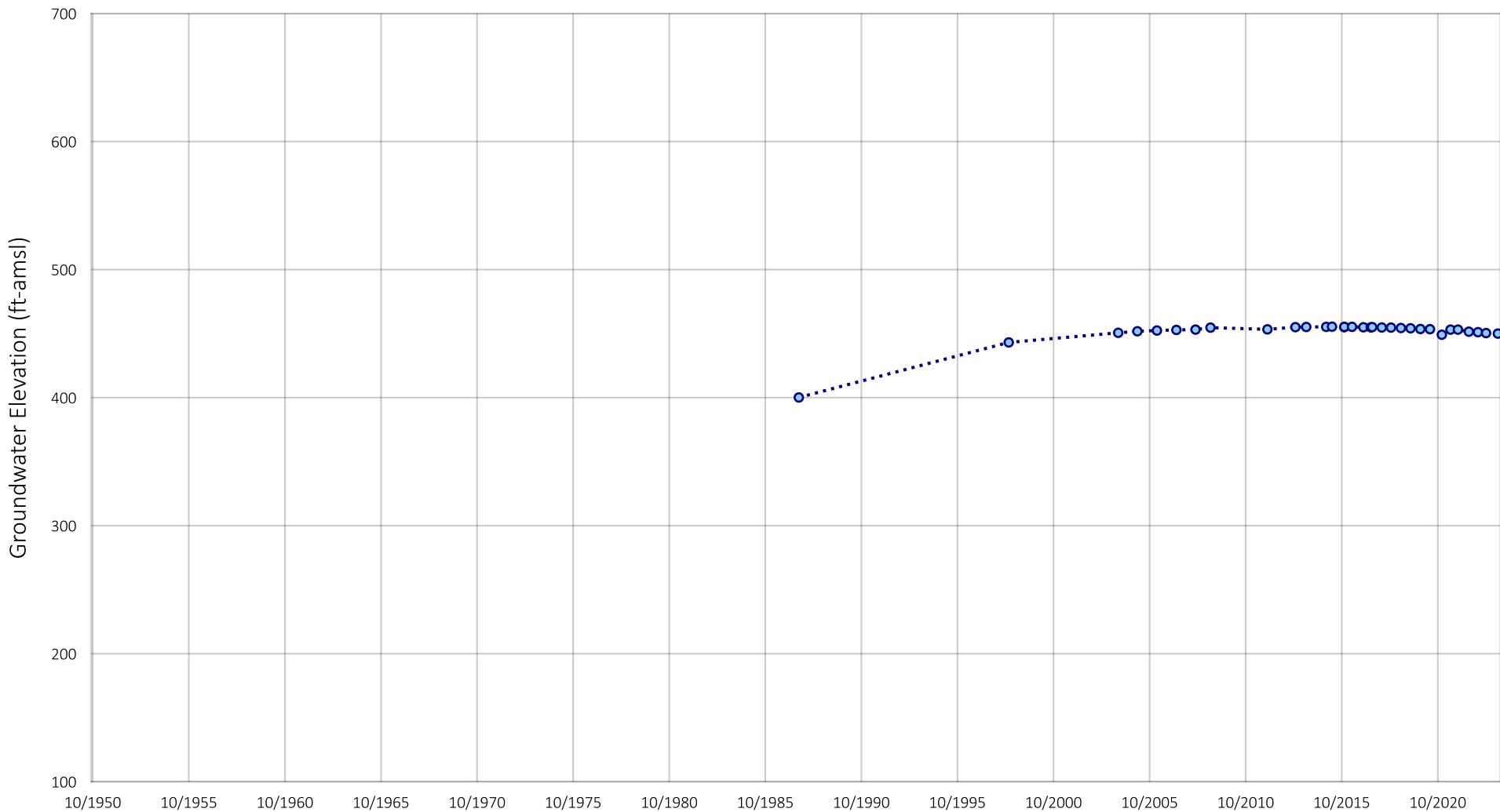


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245878  
Well Name: ID1-10  
State Well ID: 011S006E22D001S

Figure F-33



Location of Well in Borrego Springs

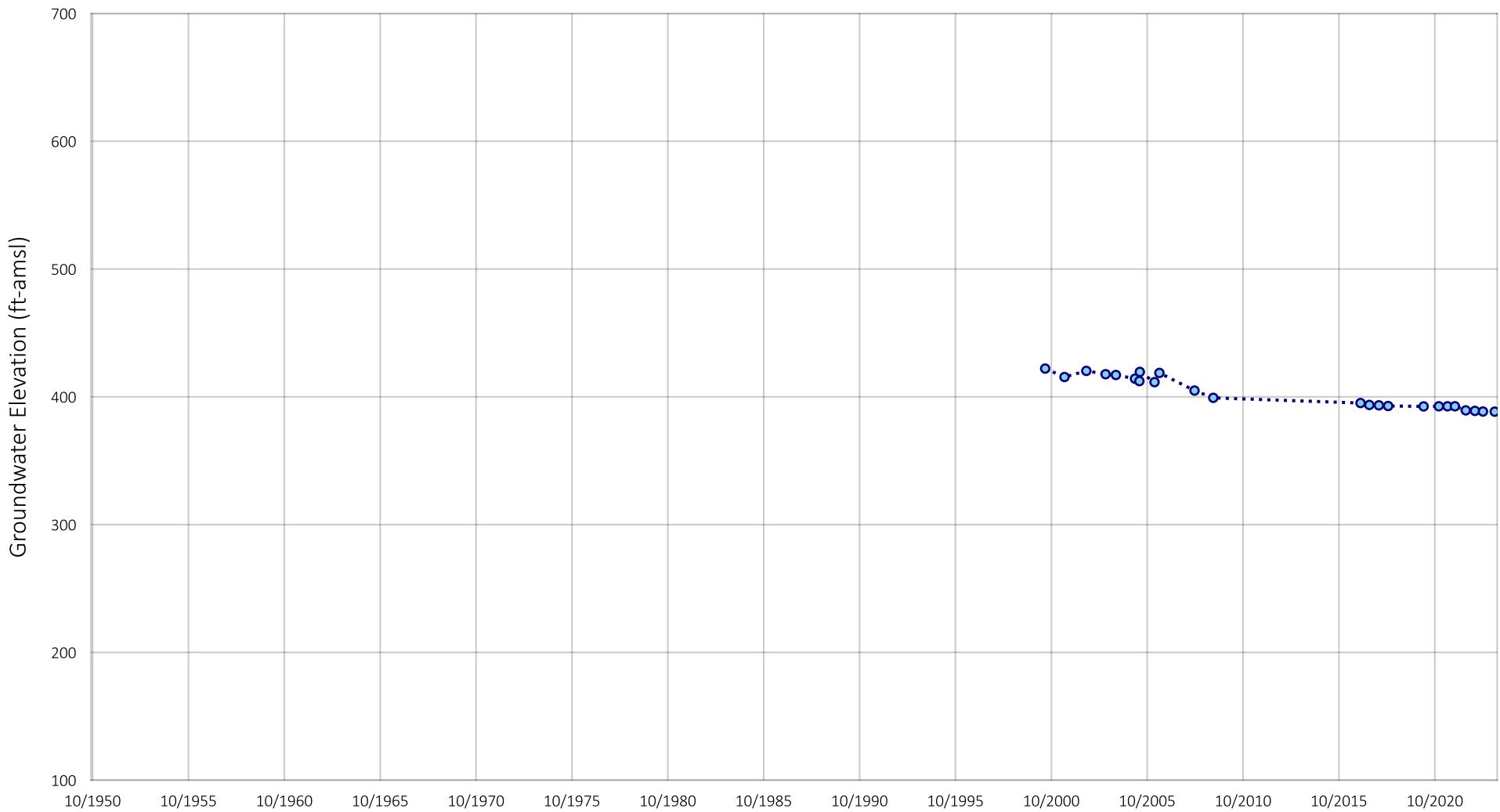


Prepared by:

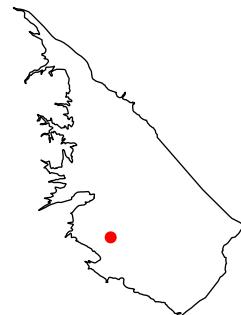


Historical Groundwater Level Elevation  
BSWM ID: 1245903  
Well Name: Paddock  
State Well ID: 011S006E22B001S

Figure F-34



Location of Well in Borrego Springs

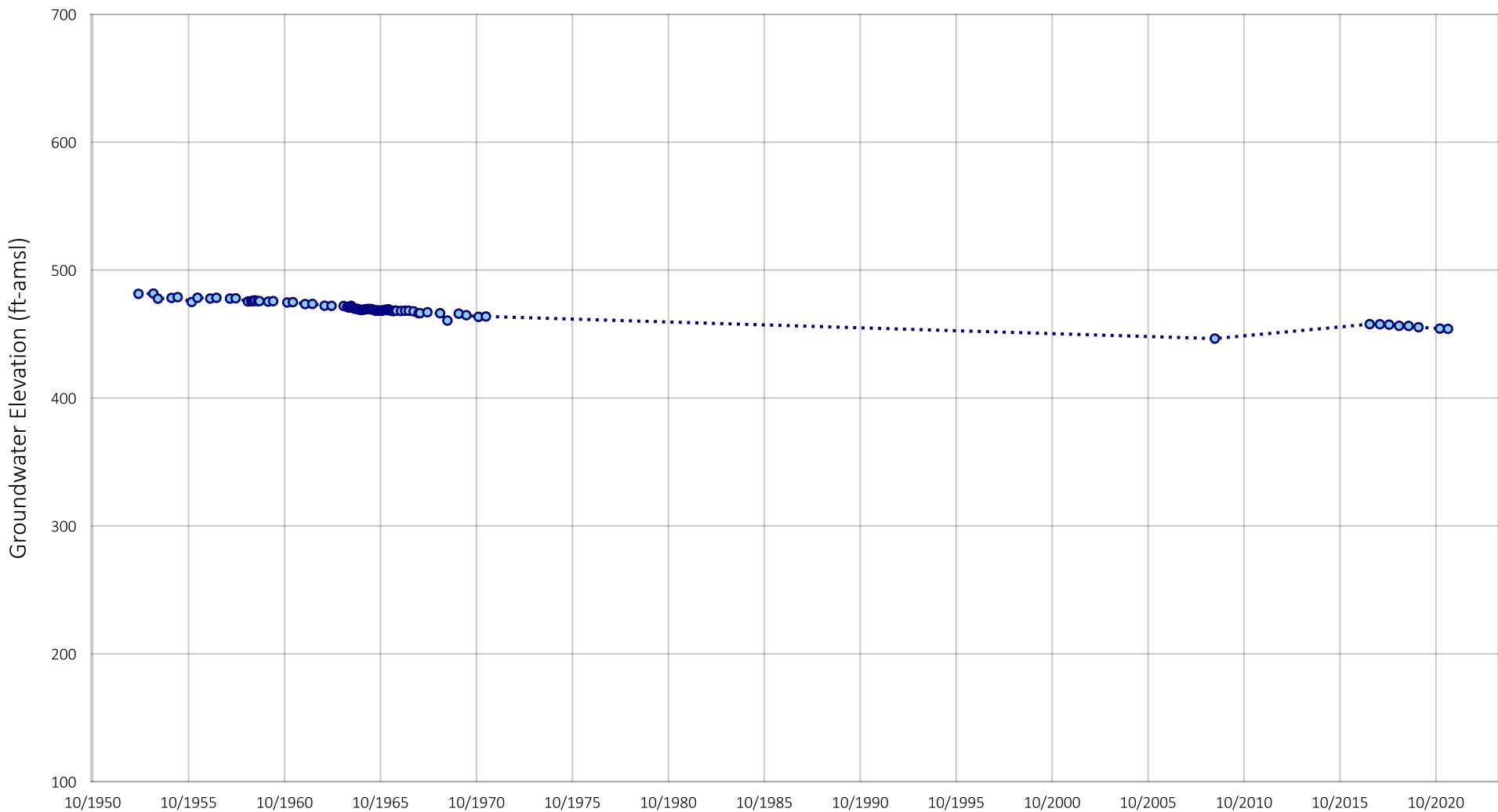


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245931  
Well Name: ID4-20 (Wilcox)  
State Well ID: 011S006E20A001S

Figure F-35



Location of Well in Borrego Springs

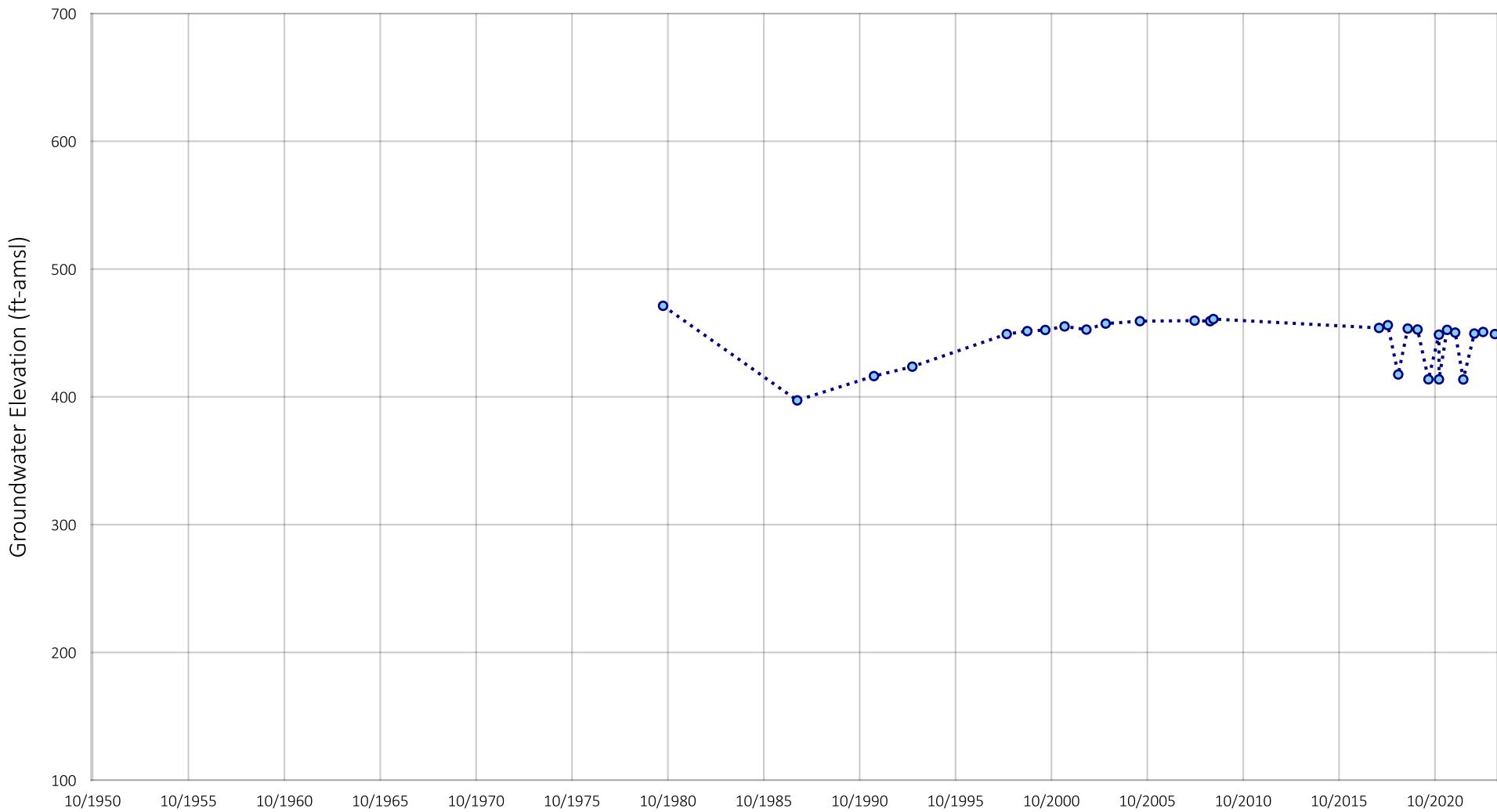


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245856  
Well Name: Bakko  
State Well ID: 011S006E22A001S

Figure F-36



Location of Well in Borrego Springs

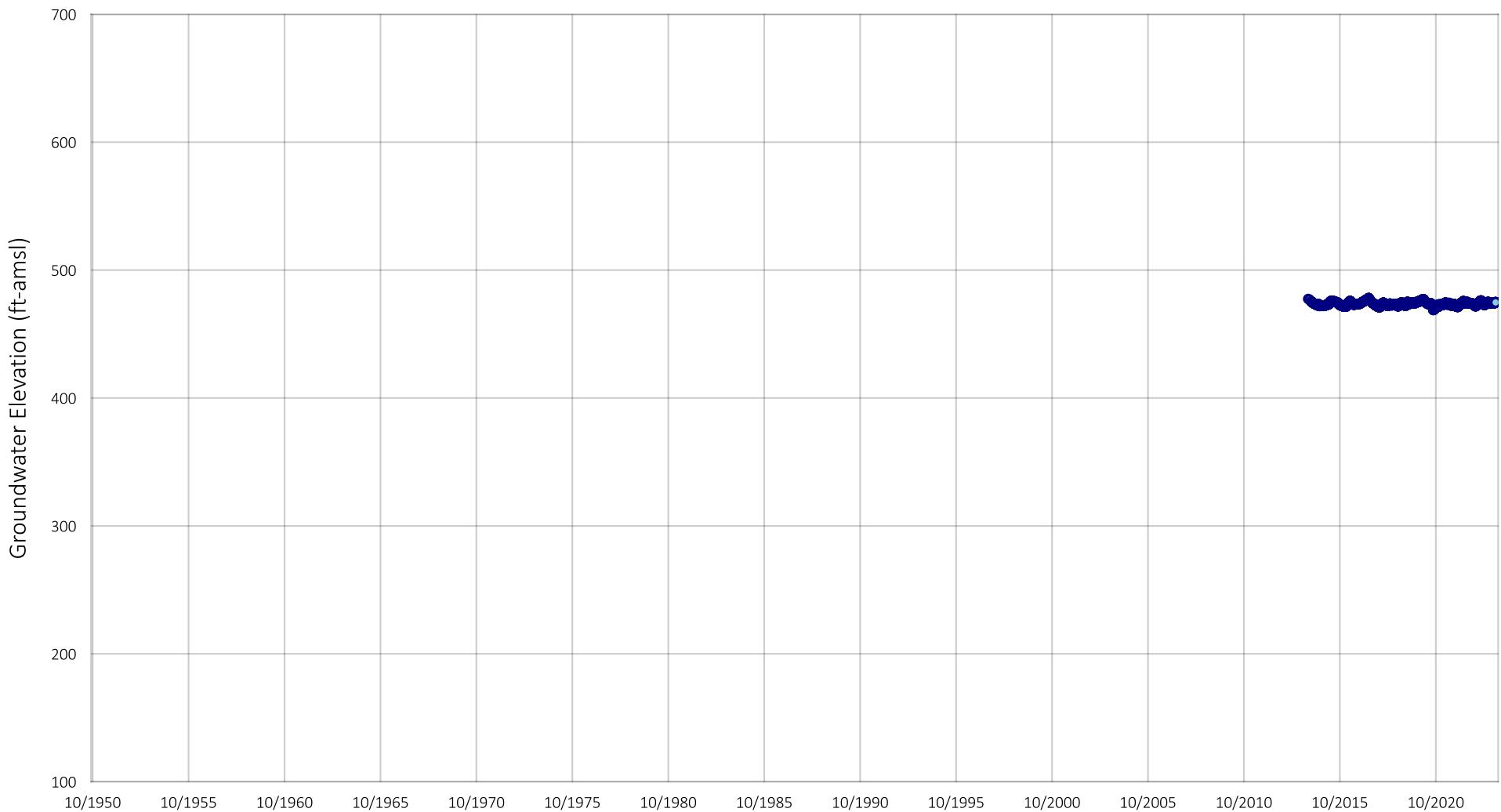


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245895  
Well Name: La Casa  
State Well ID: 011S006E23E001S

Figure F-37



Location of Well in Borrego Springs

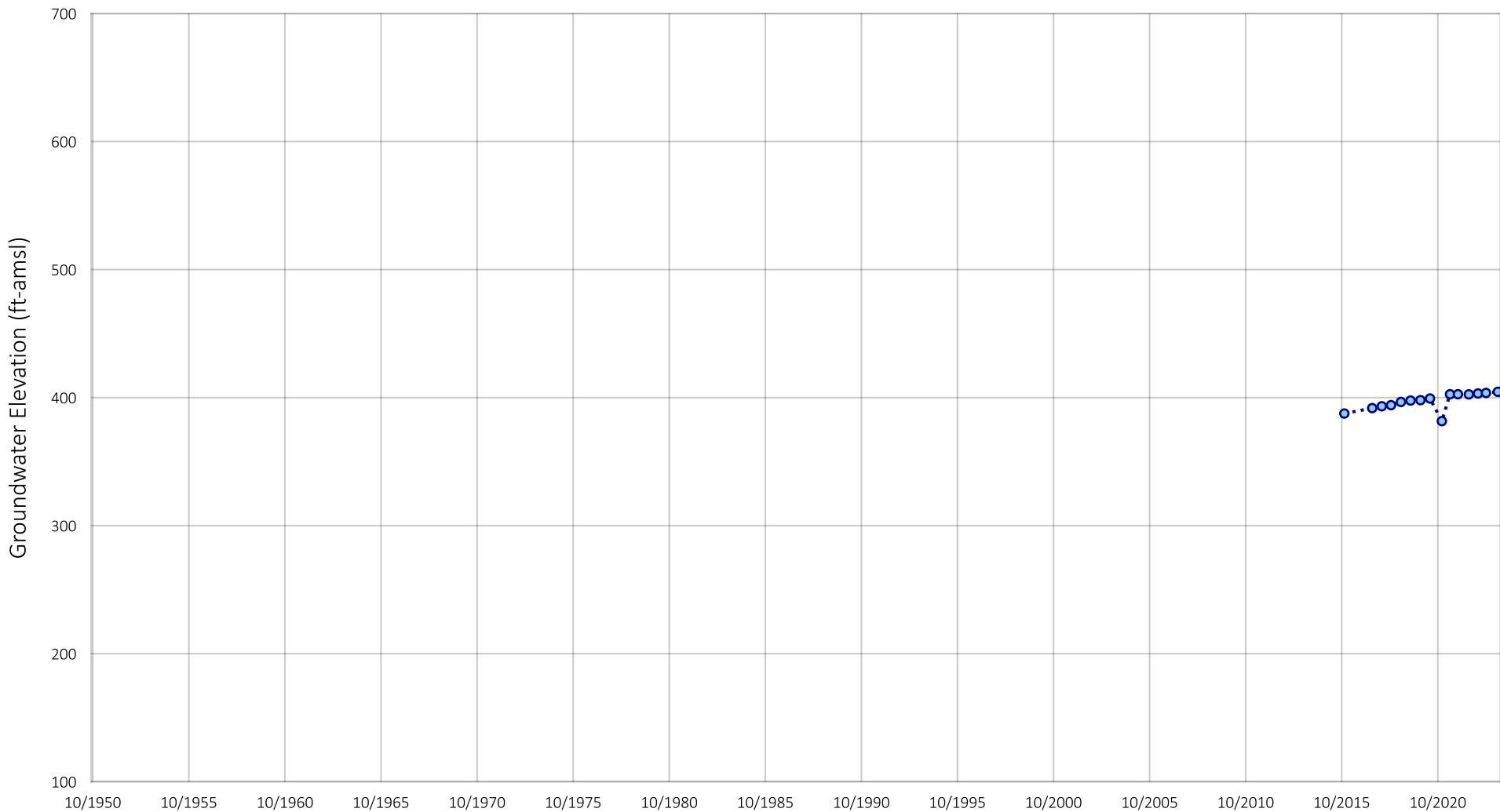


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245932  
Well Name: WWTP-1  
State Well ID: 011S006E23H001S

Figure F-38



Location of Well in Borrego Springs

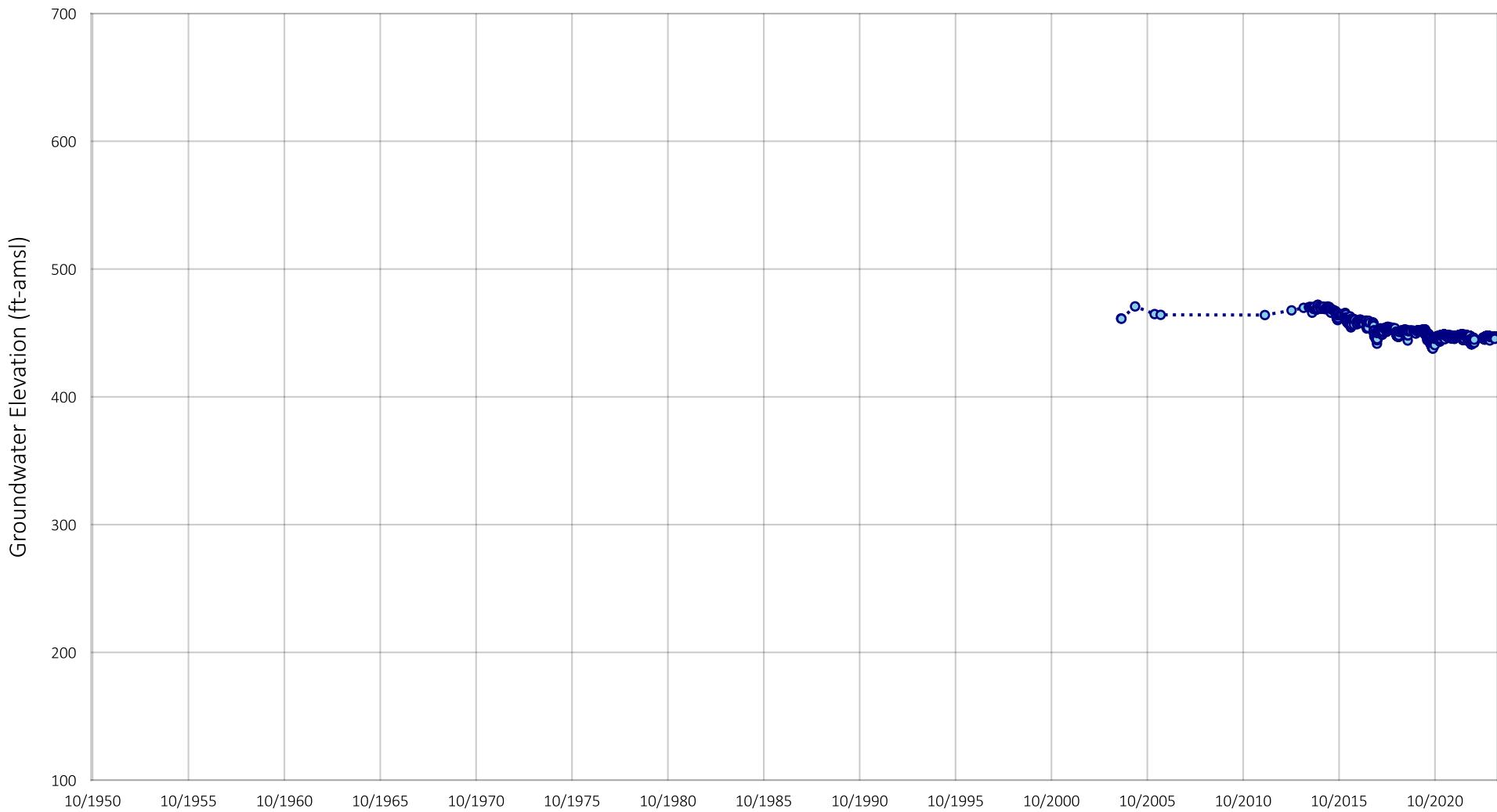


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245853  
Well Name: Anzio/Yaqui Pass  
State Well ID: 011S006E22E001S

Figure F-39



Location of Well in Borrego Springs

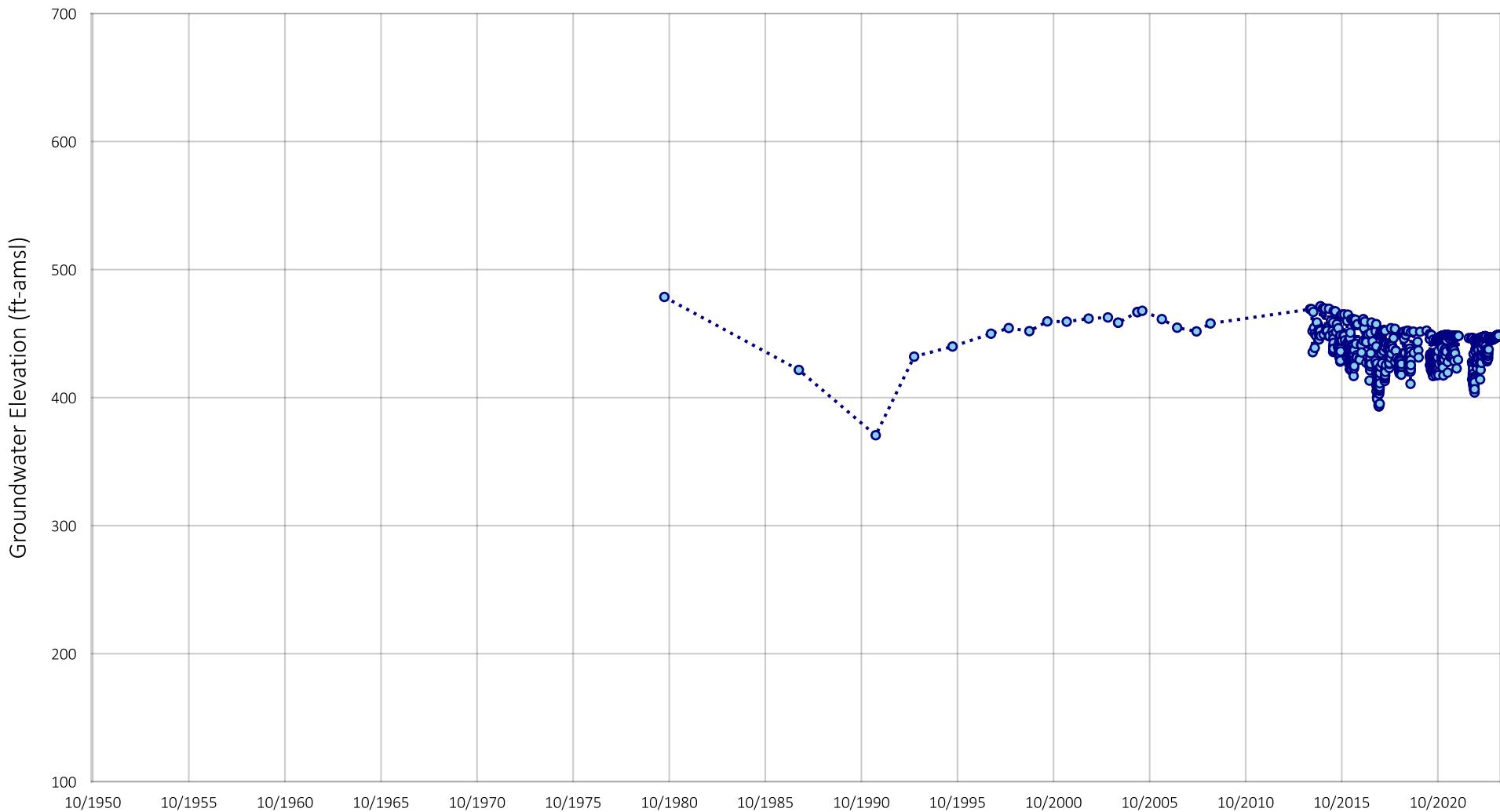


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245898  
Well Name: MW-3  
State Well ID: 011S006E23J002S

Figure F-40



Location of Well in Borrego Springs

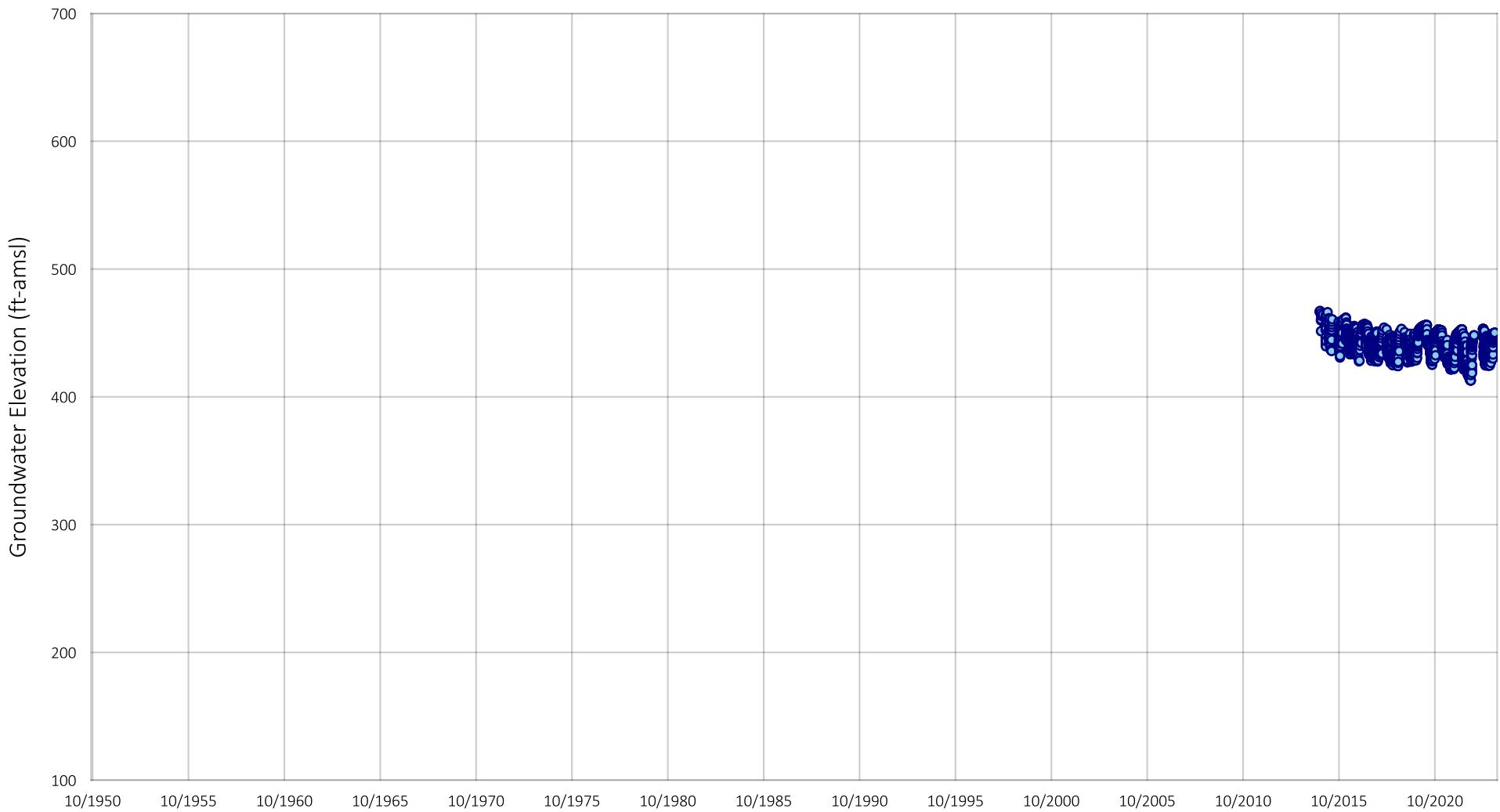


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245882  
Well Name: ID1-8  
State Well ID: 011S006E23J001S

Figure F-41



Location of Well in Borrego Springs

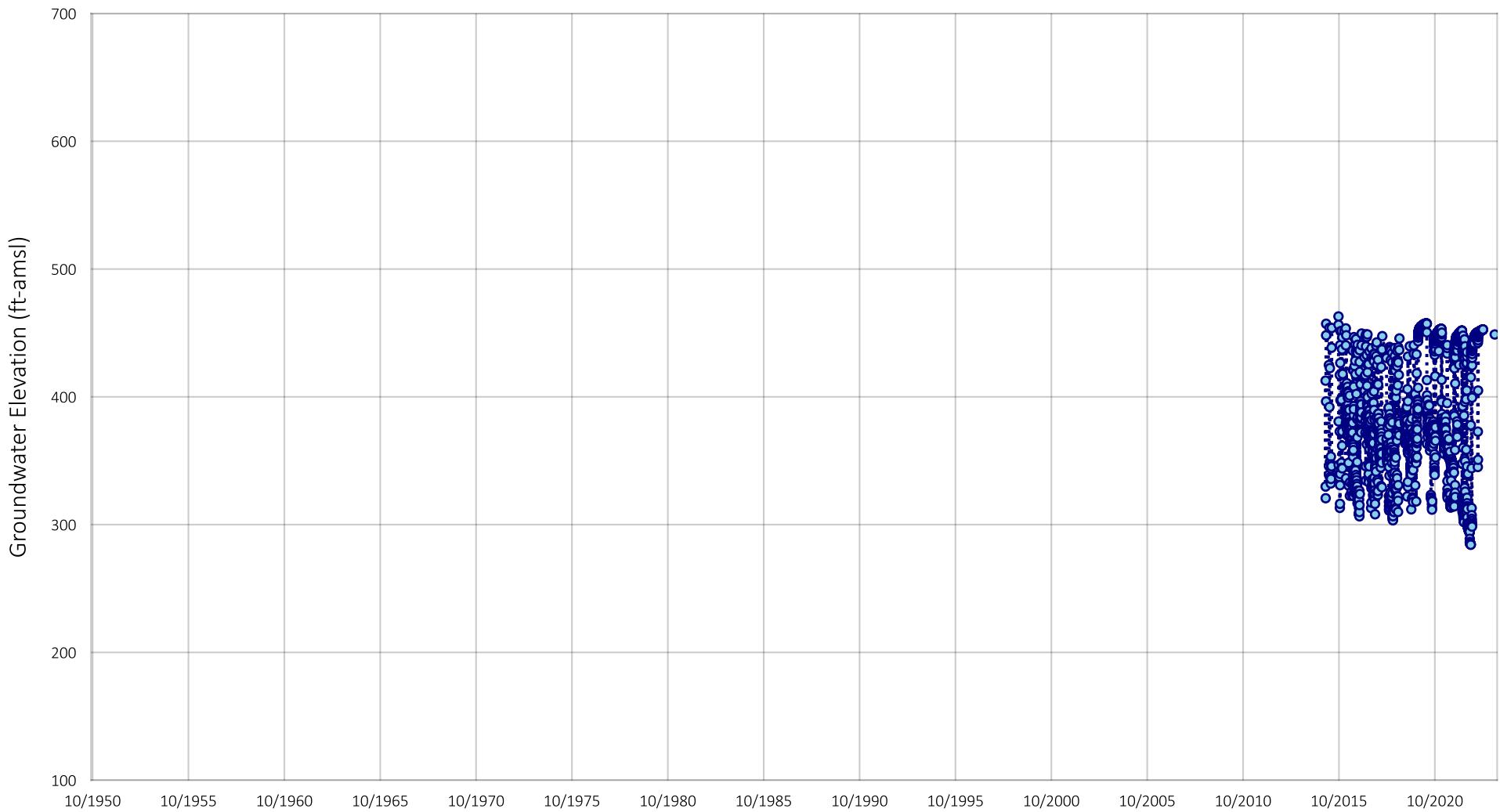


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245894  
Well Name: JC Well  
State Well ID: 011S006E24Q001S

Figure F-42



Location of Well in Borrego Springs

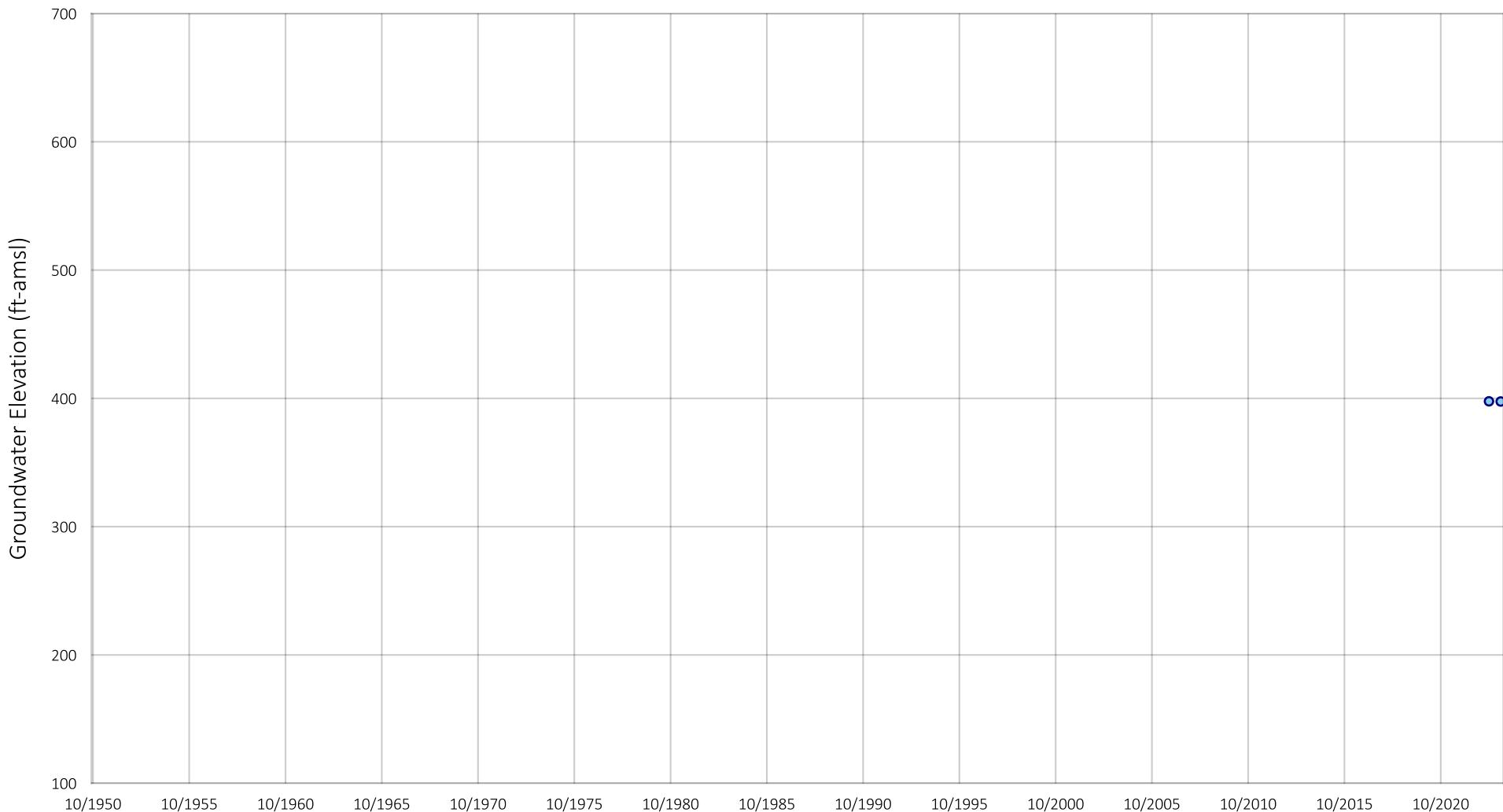


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245910  
Well Name: RH-4  
State Well ID: 011S006E24Q002S

Figure F-43



Location of Well in Borrego Springs



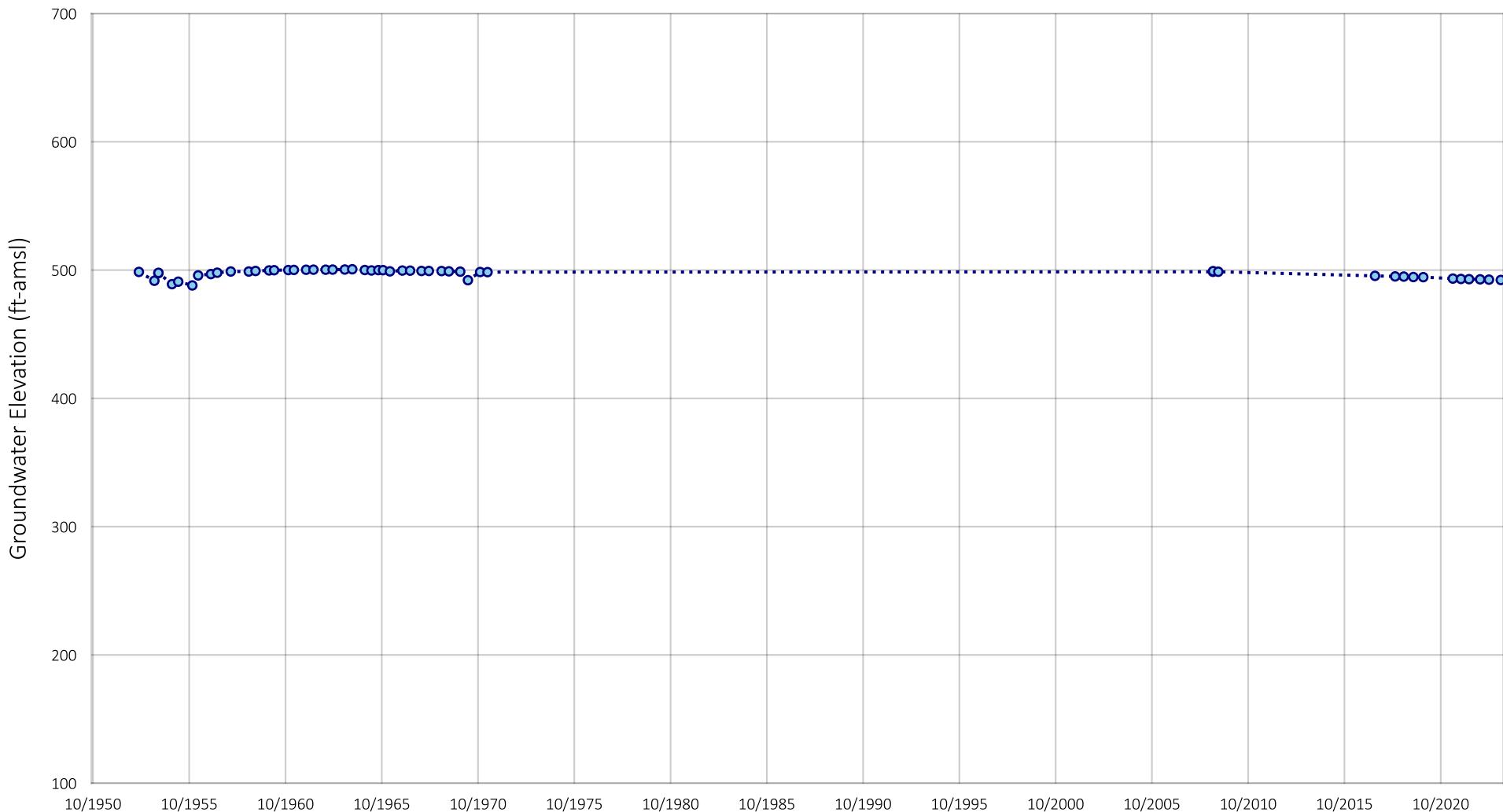
Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245836

Well Name: Terry Well (011S006E20R001S)  
State Well ID: 011S006E20R001S

Figure F-44



Location of Well in Borrego Springs

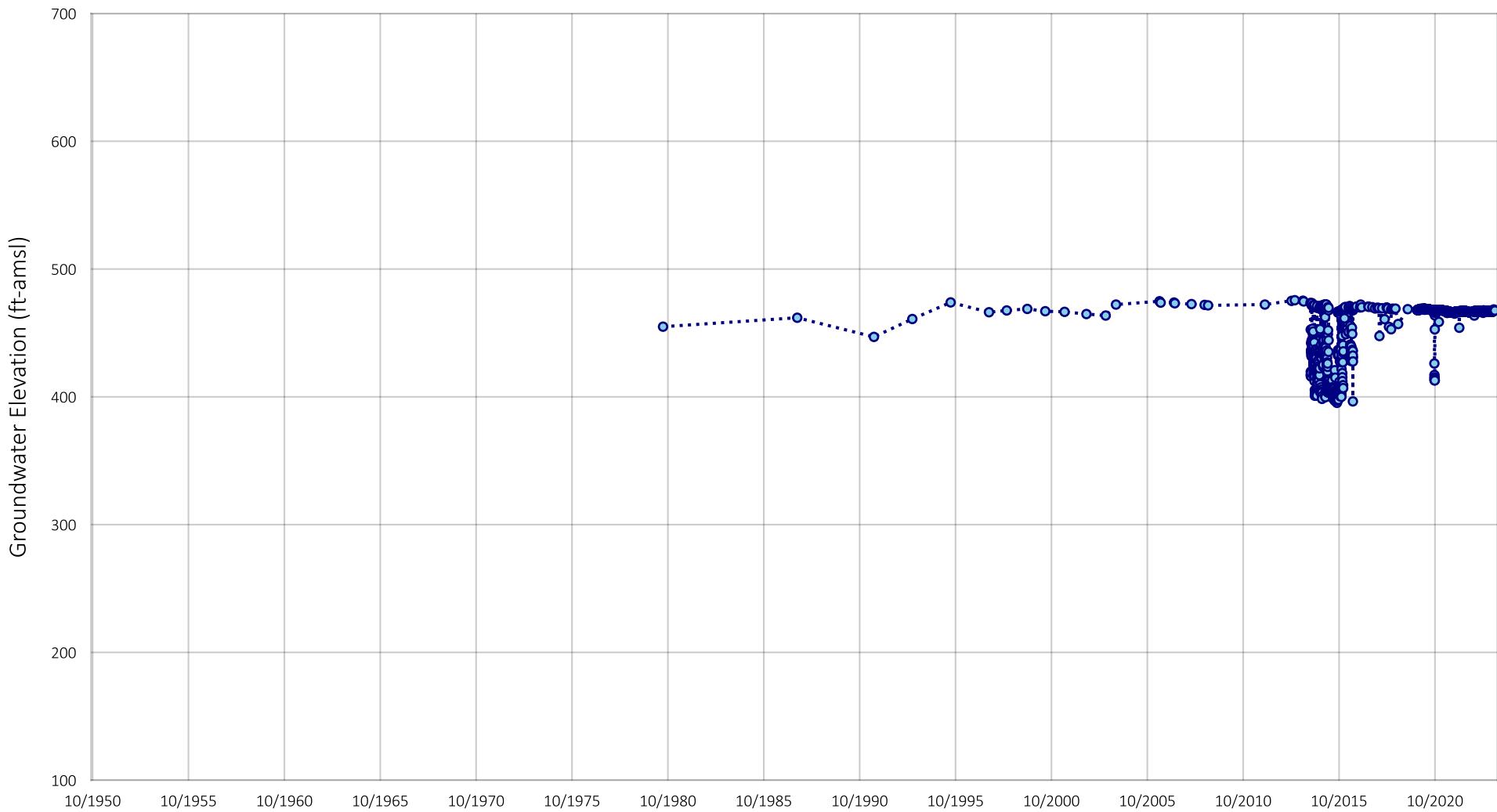


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245859  
Well Name: Bing Crosby Well (Sky Ranch)  
State Well ID: 011S007E20P001S

Figure F-45



Location of Well in Borrego Springs

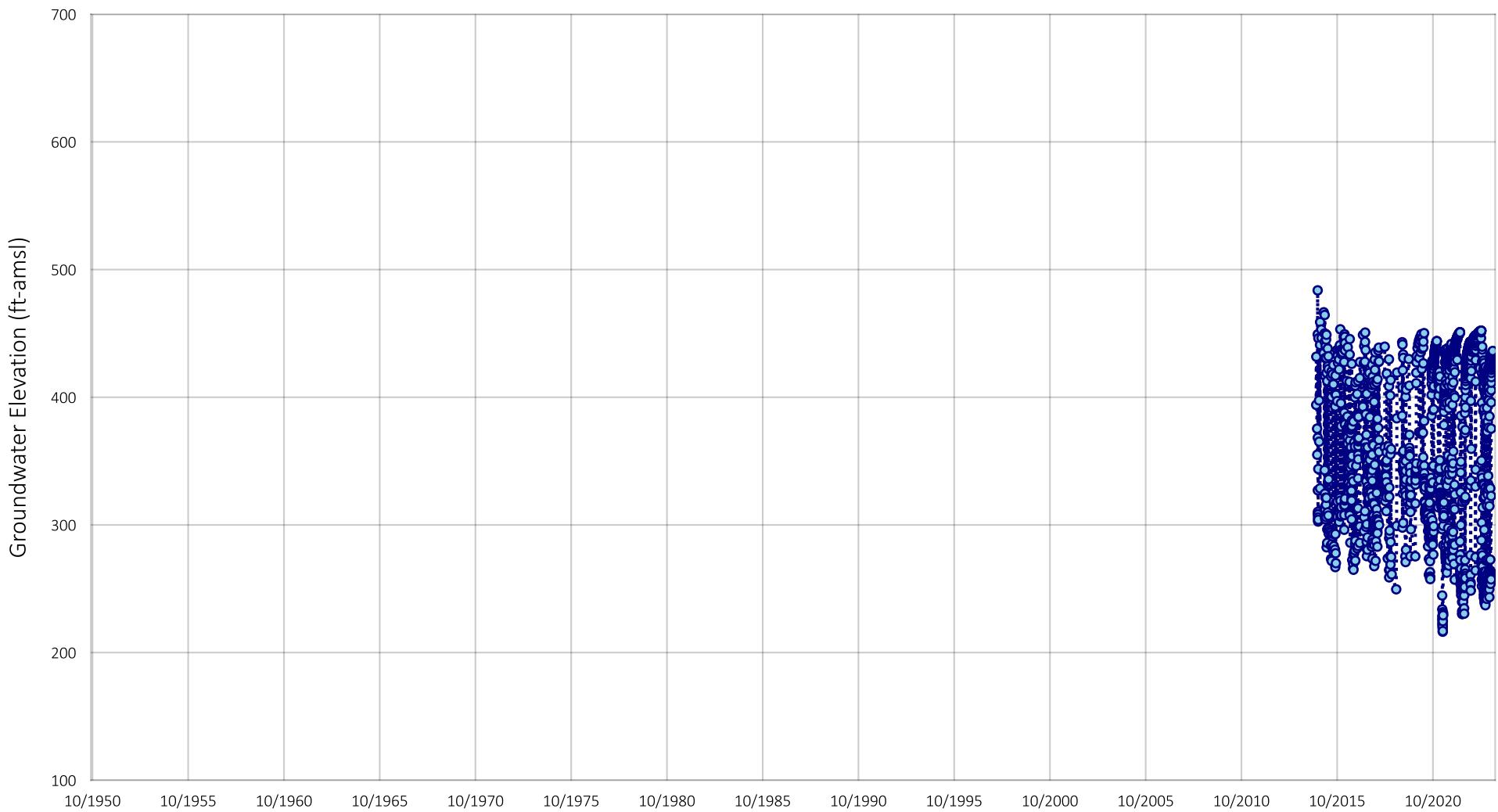


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245877  
Well Name: RH-1 (ID1-1)  
State Well ID: 011S006E25A001S

Figure F-46



Location of Well in Borrego Springs

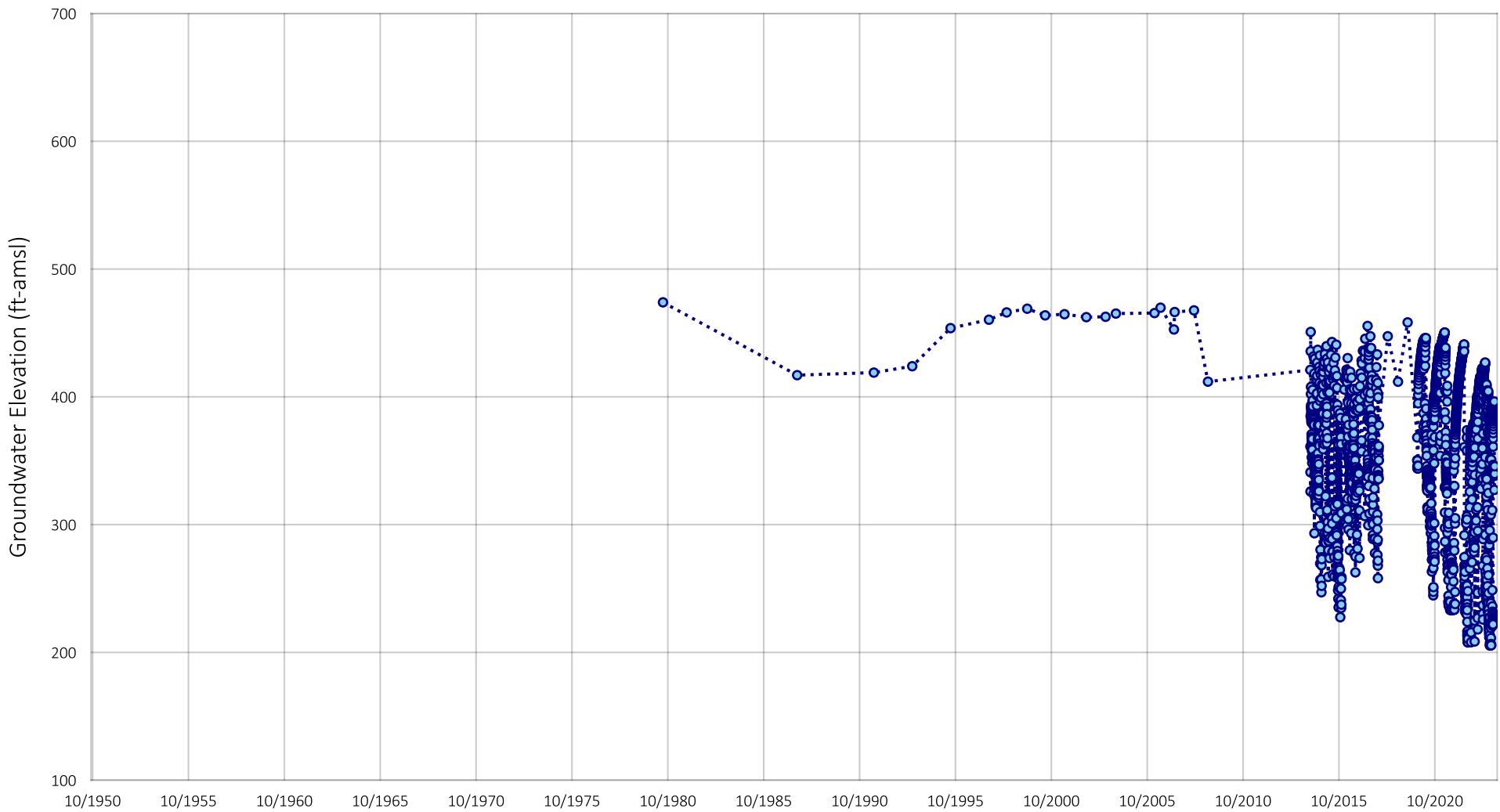


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245909  
Well Name: RH-3  
State Well ID: 011S006E25C002S

Figure F-47



Location of Well in Borrego Springs

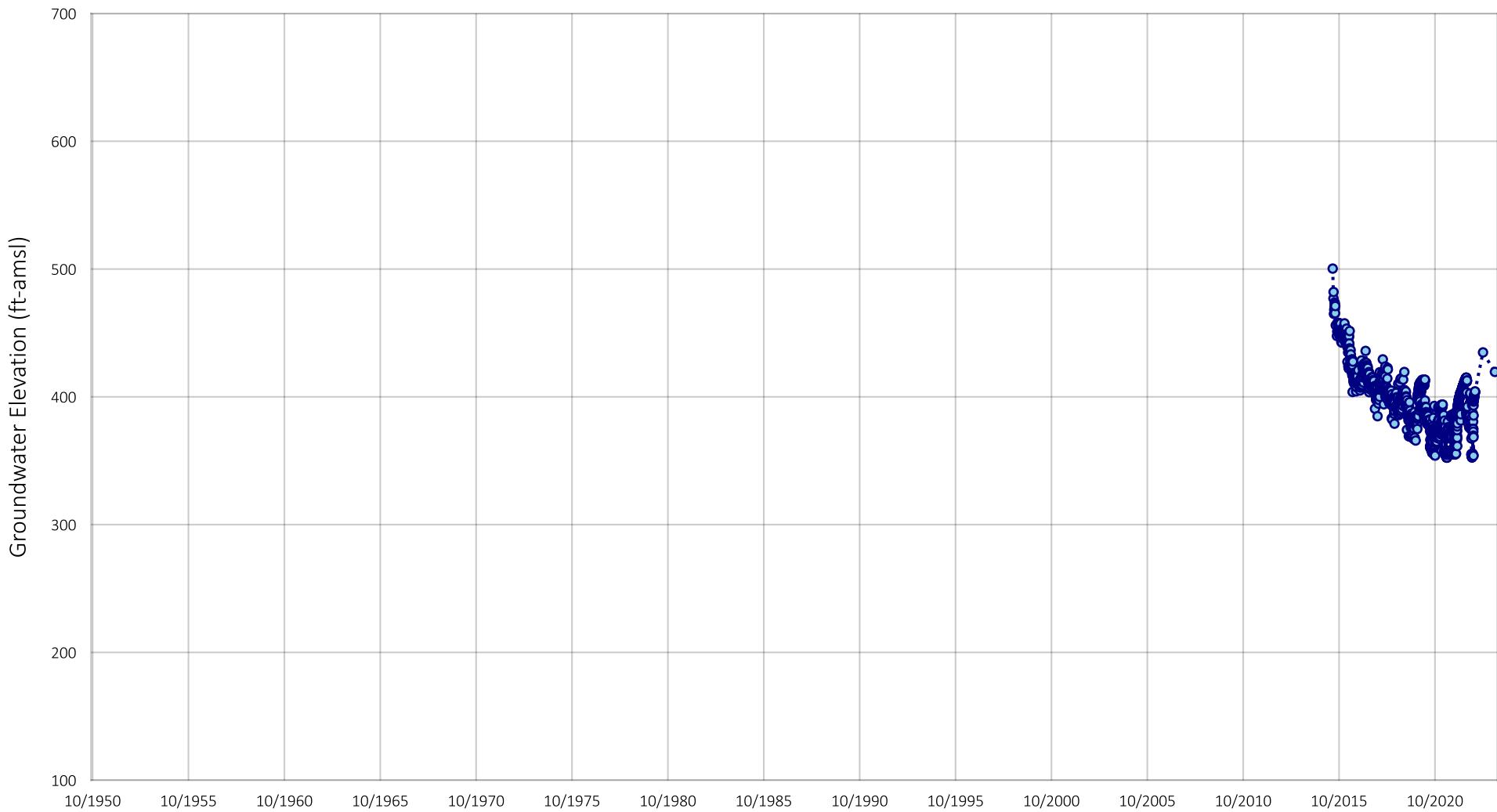


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245881  
Well Name: RH-2 (ID1-2)  
State Well ID: 011S006E25C001S

Figure F-48



Location of Well in Borrego Springs

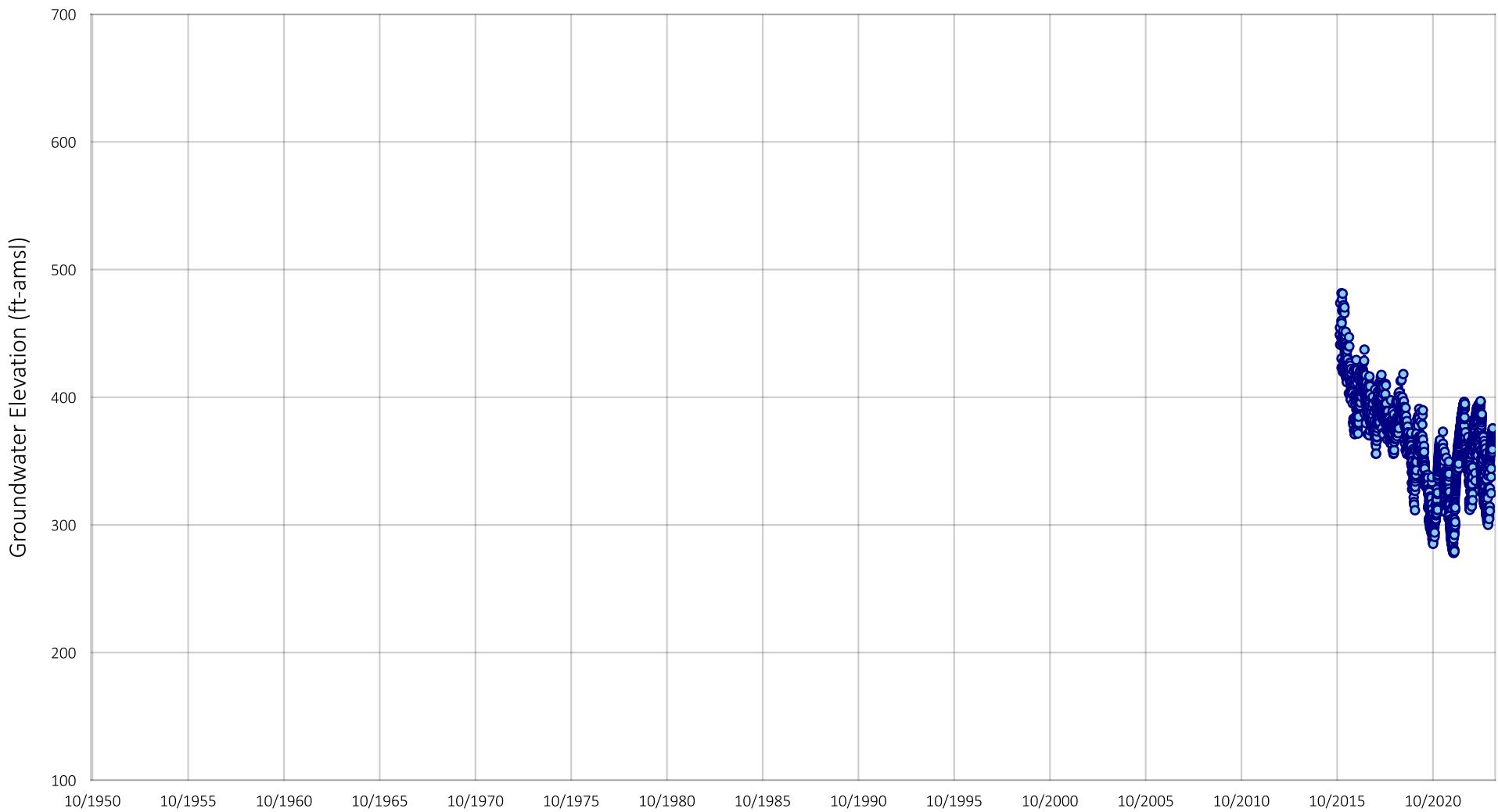


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245911  
Well Name: RH-5  
State Well ID: 011S006E26B001S

Figure F-49



Location of Well in Borrego Springs

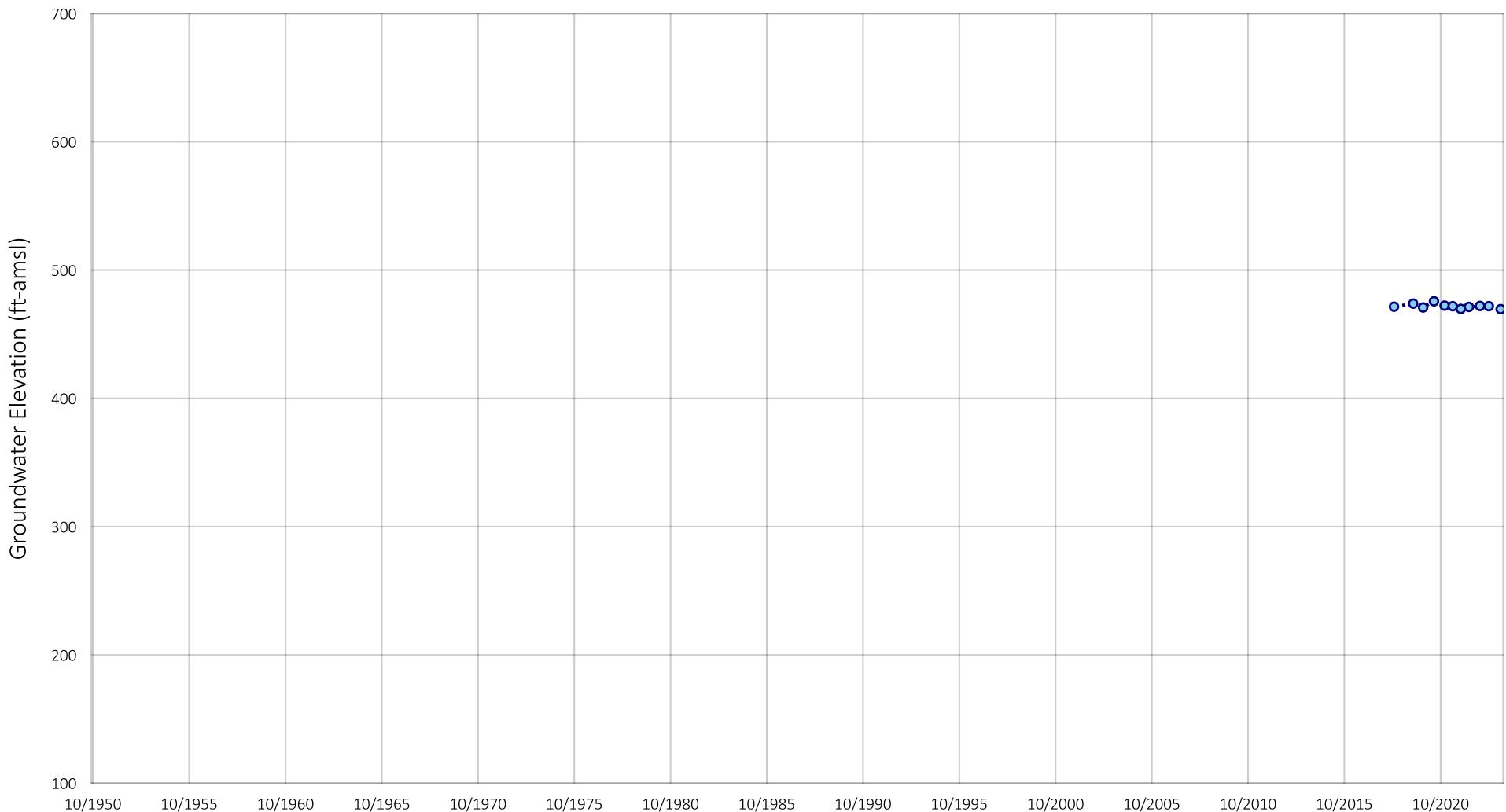


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245912  
Well Name: RH-6  
State Well ID: 011S006E26H001S

Figure F-50



Location of Well in Borrego Springs

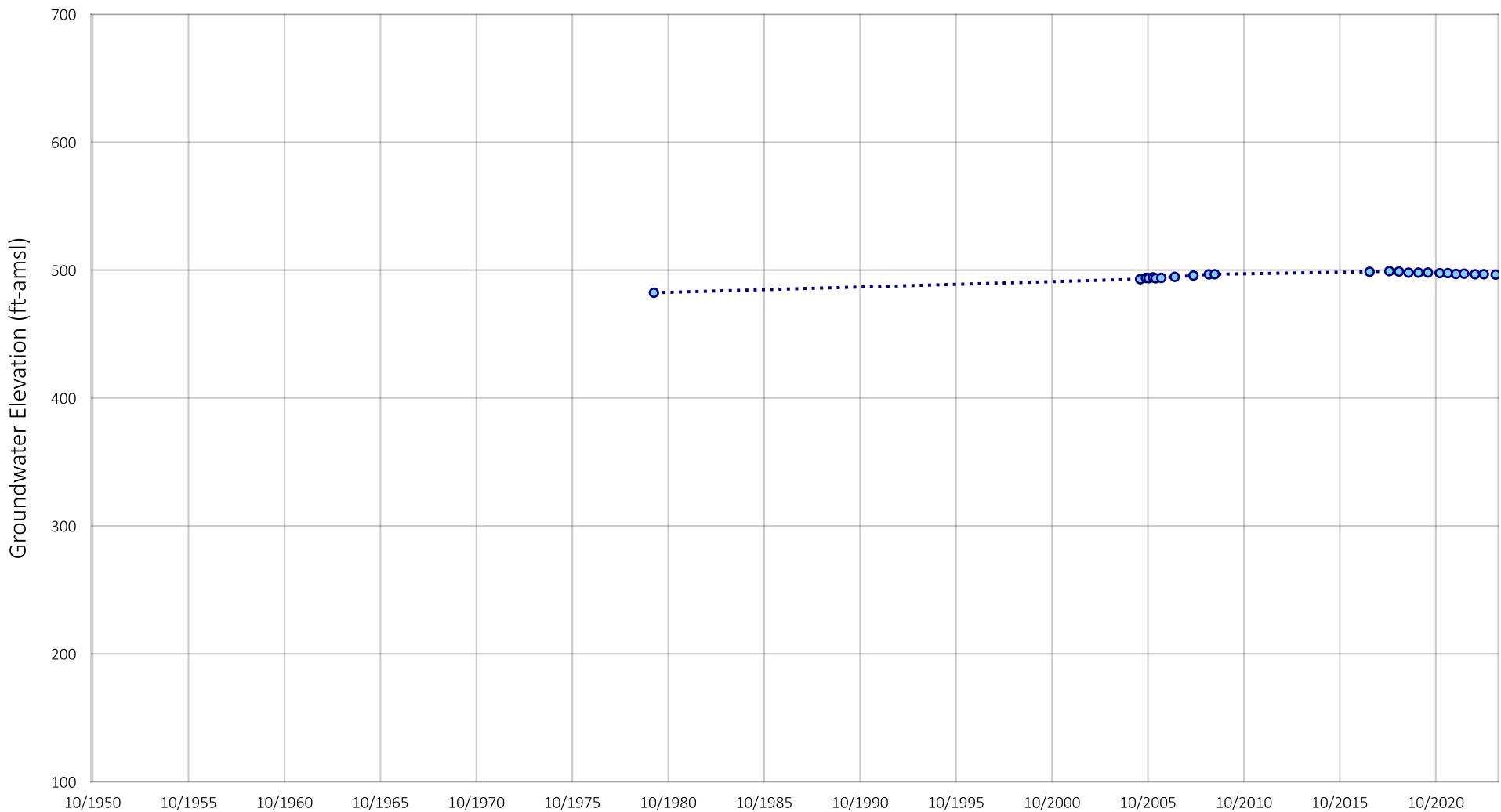


Prepared by:

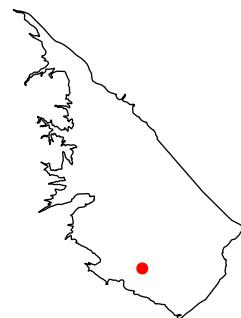


Historical Groundwater Level Elevation  
BSWM ID: 1245852  
Well Name: Air Ranch Well 4  
State Well ID: 011S007E30L001S

Figure F-51



Location of Well in Borrego Springs

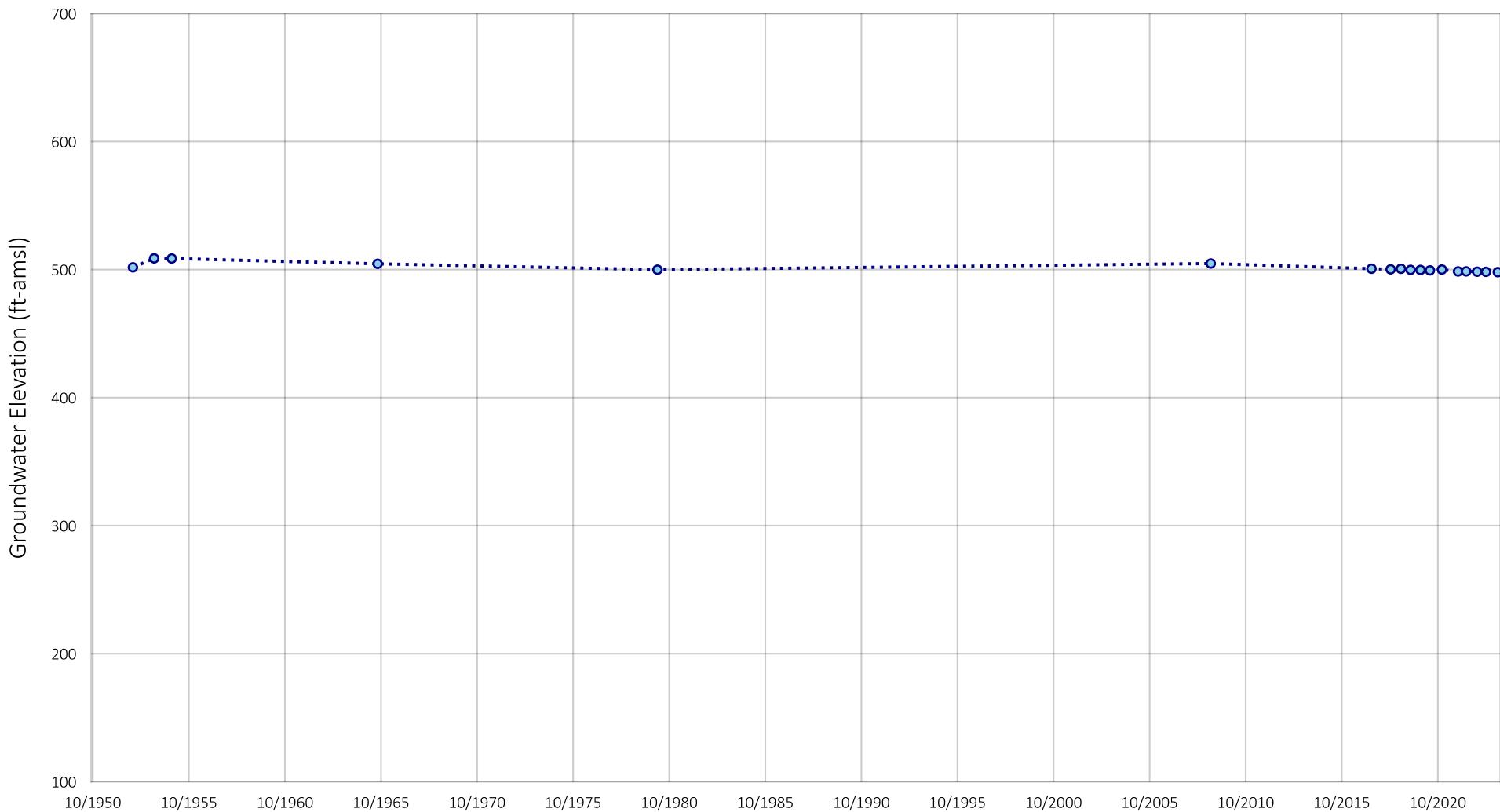


Prepared by:

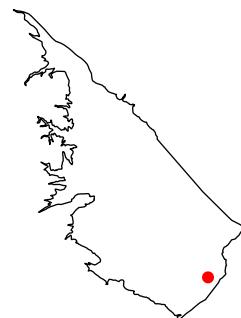


Historical Groundwater Level Elevation  
BSWM ID: 1245854  
Well Name: Army Well  
State Well ID: 011S006E34A001S

Figure F-52



Location of Well in Borrego Springs

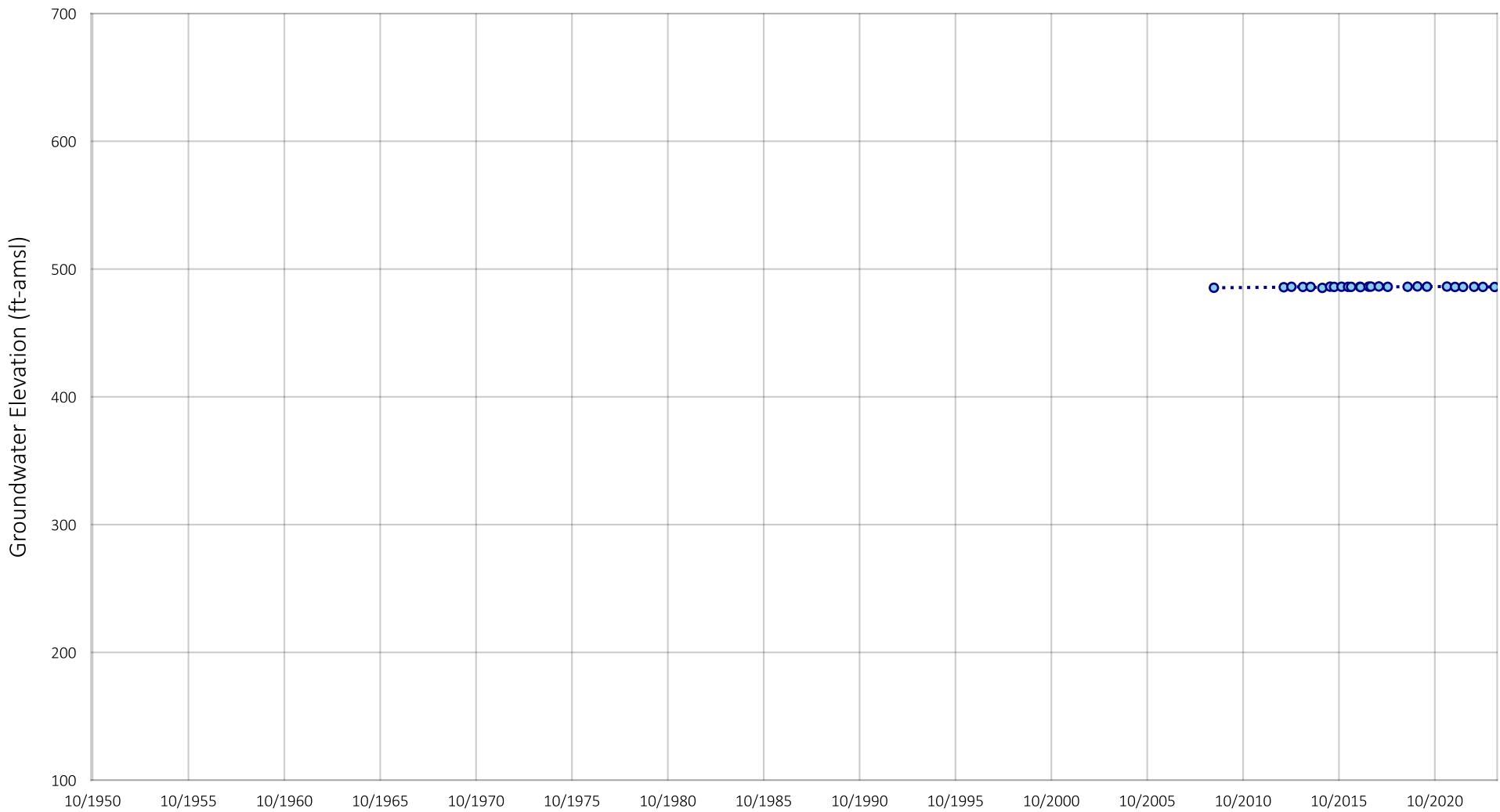


Prepared by:

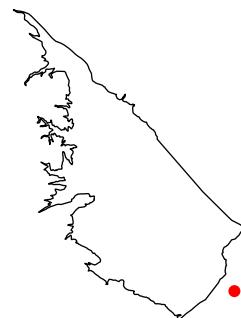


Historical Groundwater Level Elevation  
BSWM ID: 1245875  
Well Name: Hayden (32Q1)  
State Well ID: 011S007E32Q001S

Figure F-53



Location of Well in Borrego Springs

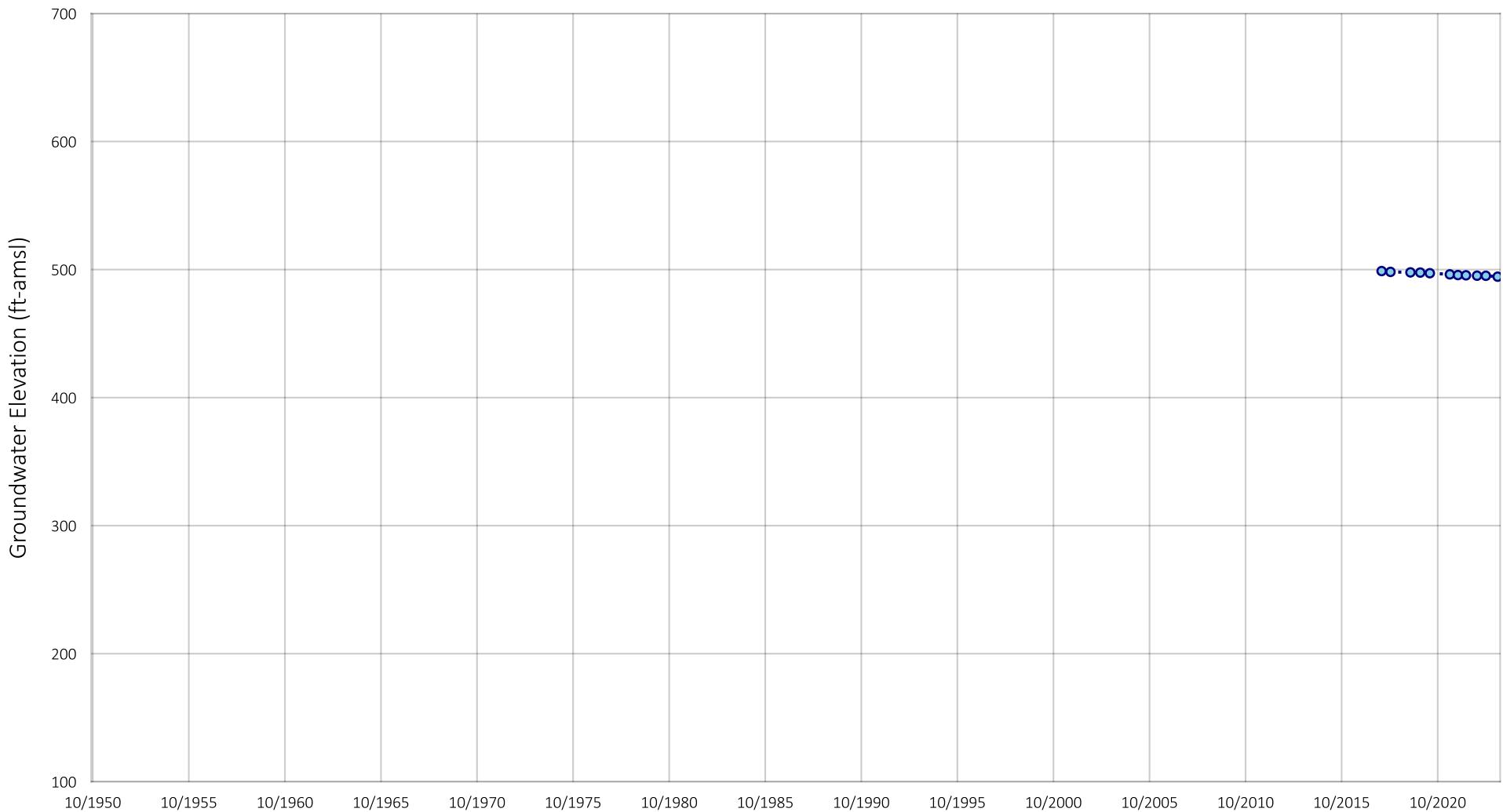


Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245902  
Well Name: Nel Well (Dr Peter Nels)  
State Well ID: 012S007E03L001S

Figure F-54



Location of Well in Borrego Springs



Prepared by:



Historical Groundwater Level Elevation  
BSWM ID: 1245925  
Well Name: State Well  
State Well ID: 012S007E04R001S

Figure F-55

## Appendix G

### Groundwater Quality Time Histories – 1970 to 2023



Location of Well in Borrego Springs

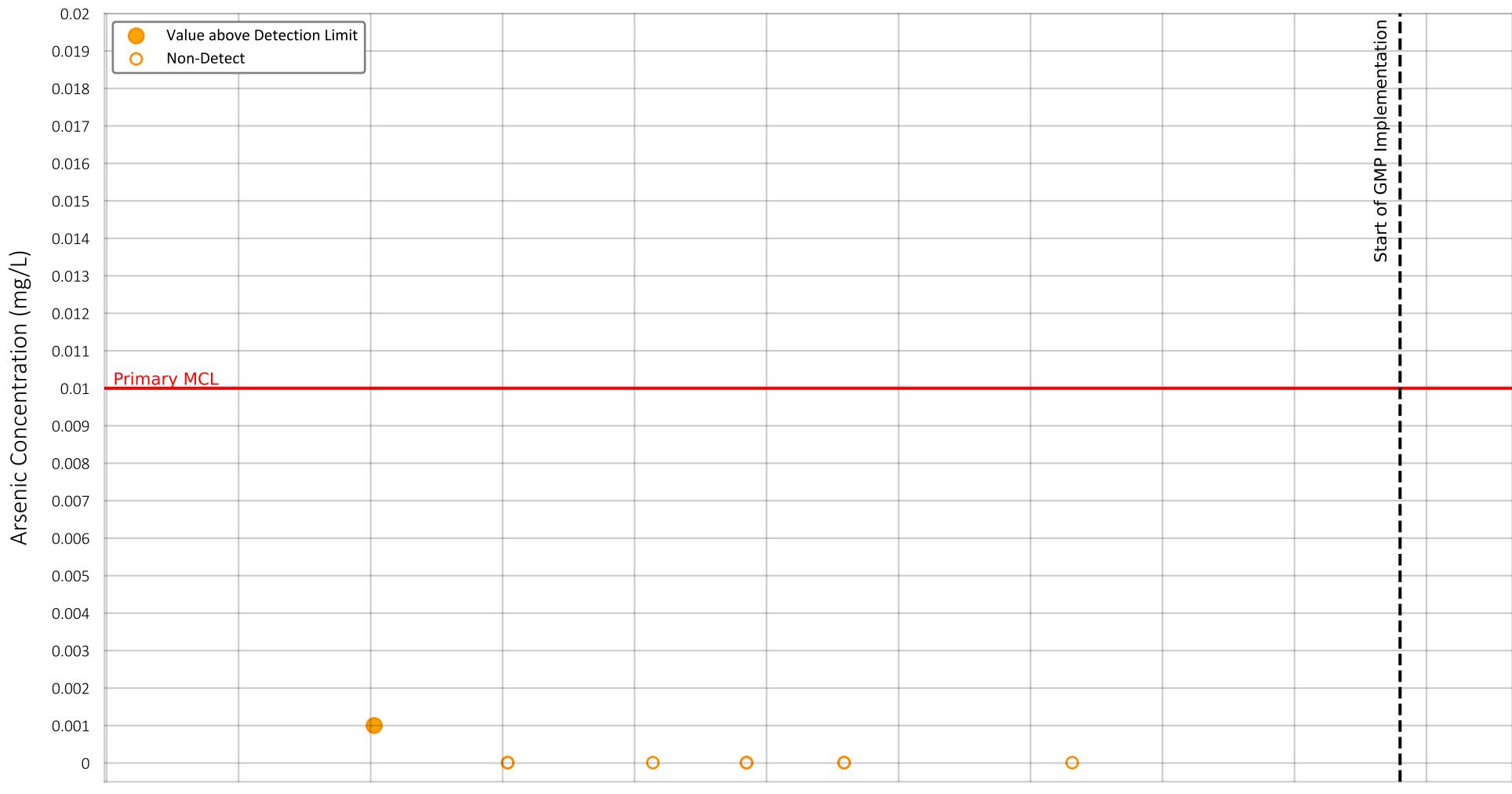


Prepared by:



Arsenic Concentration  
Well Name: RH-1 (ID1-1)  
State Well ID: 011S006E25A001S  
Well Depth (ft): 600  
Perforated Interval (ft): 180 - 580

Figure G-1



Location of Well in Borrego Springs

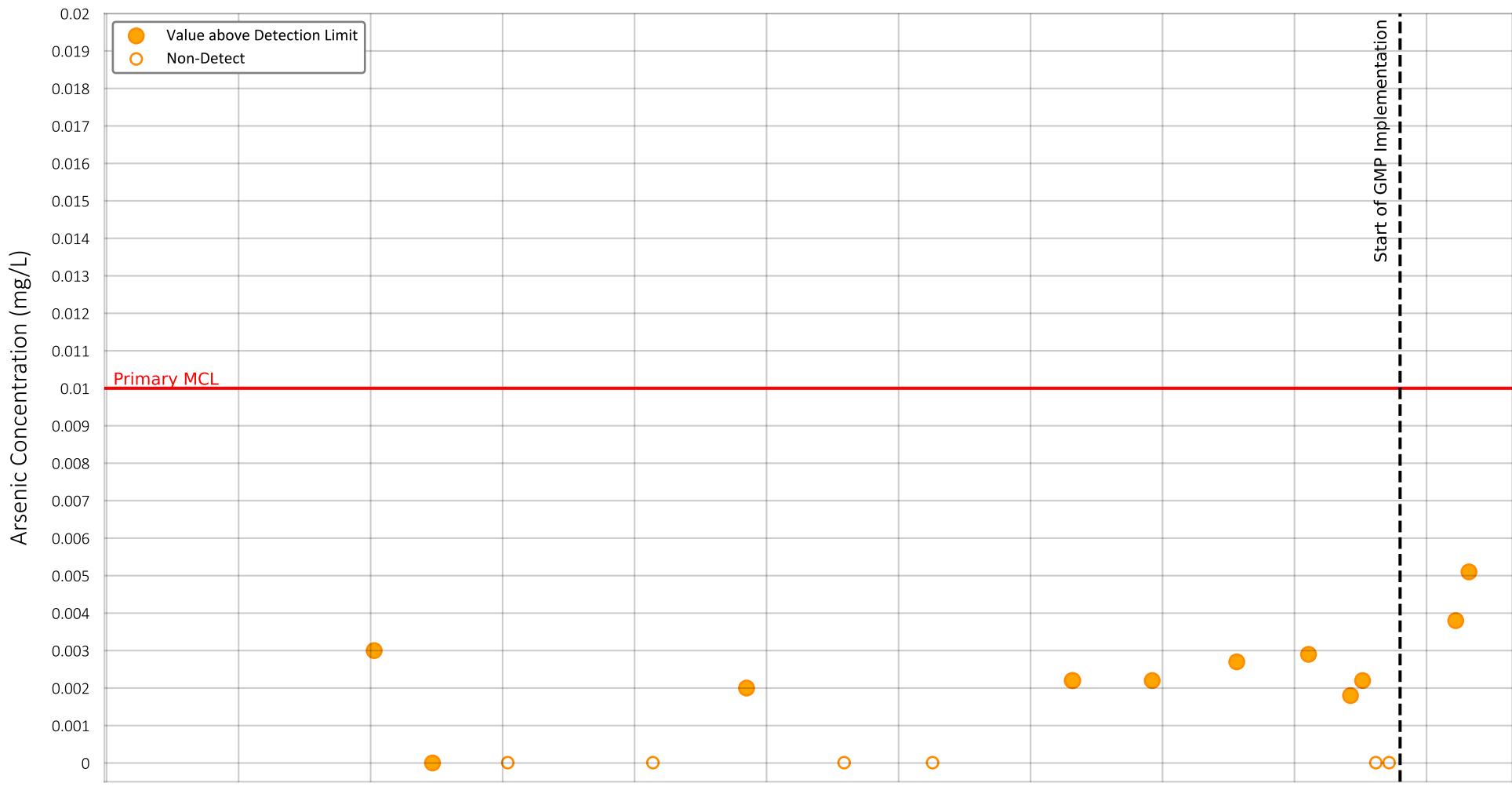


Prepared by:



Arsenic Concentration  
 Well Name: ID4-3  
 State Well ID: 010S006E18R001S  
 Well Depth (ft): 621  
 Perforated Interval (ft): no data - no data

Figure G-2



Location of Well in Borrego Springs

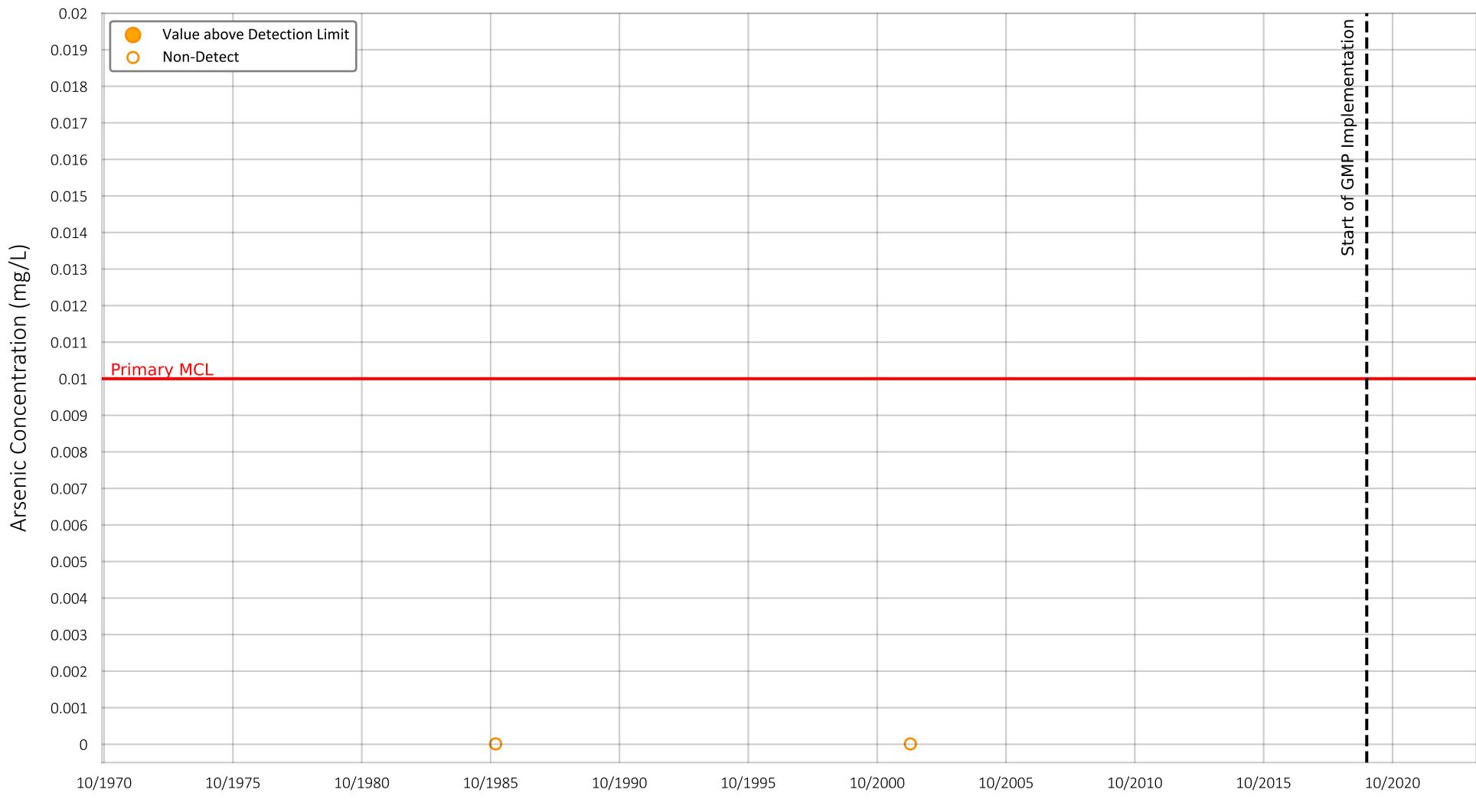


Prepared by:

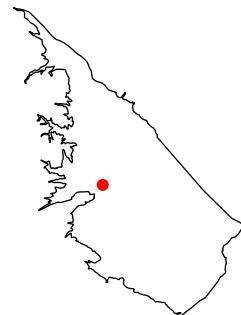


Arsenic Concentration  
 Well Name: ID4-4  
 State Well ID: 010S006E29K002S  
 Well Depth (ft): 802  
 Perforated Interval (ft): 470 - 786

Figure G-3



Location of Well in Borrego Springs

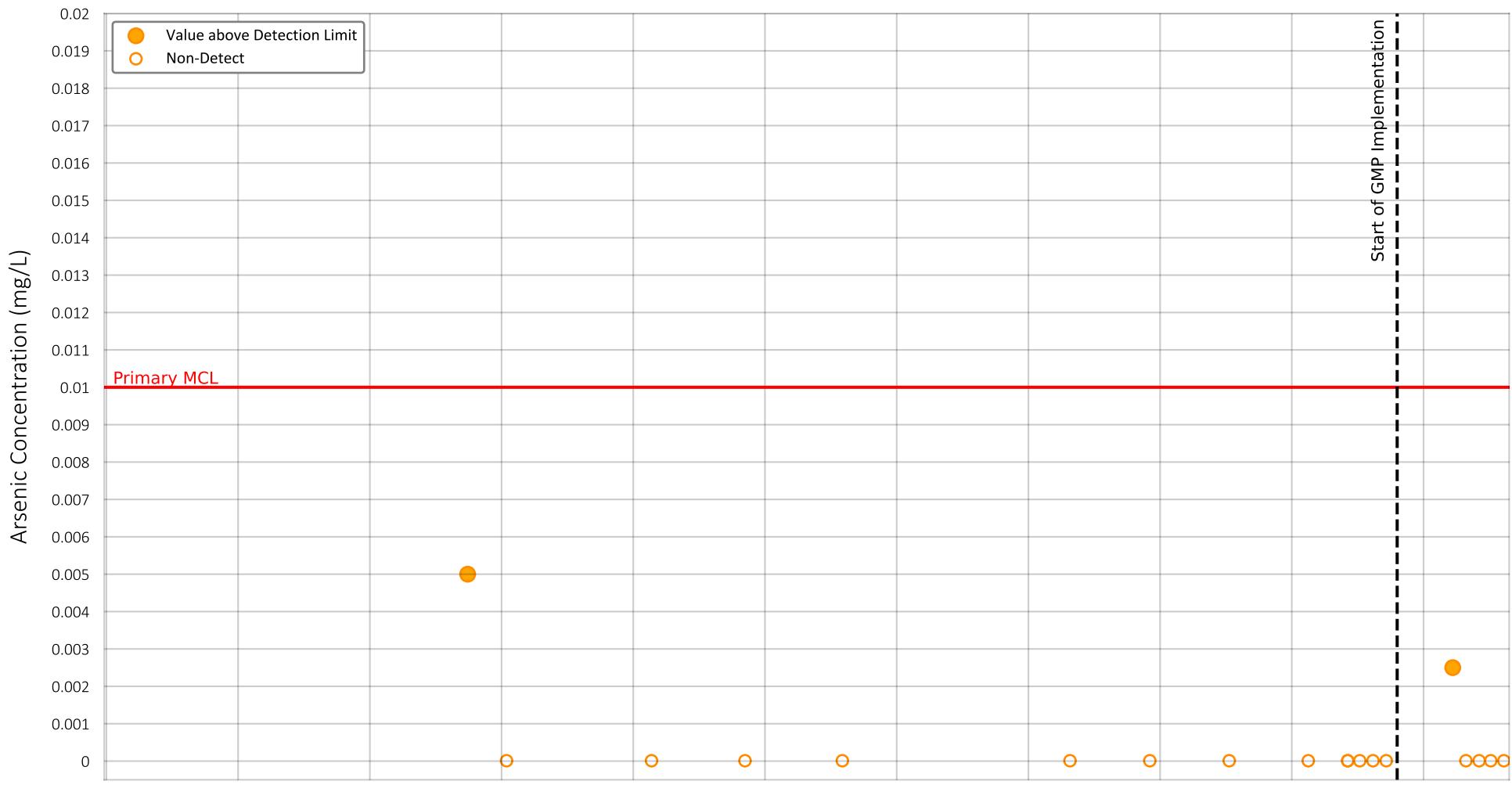


Prepared by:



Arsenic Concentration  
Well Name: ID4-1  
State Well ID: 010S006E32R001S  
Well Depth (ft): no data  
Perforated Interval (ft): no data - no data

Figure G-4



Location of Well in Borrego Springs

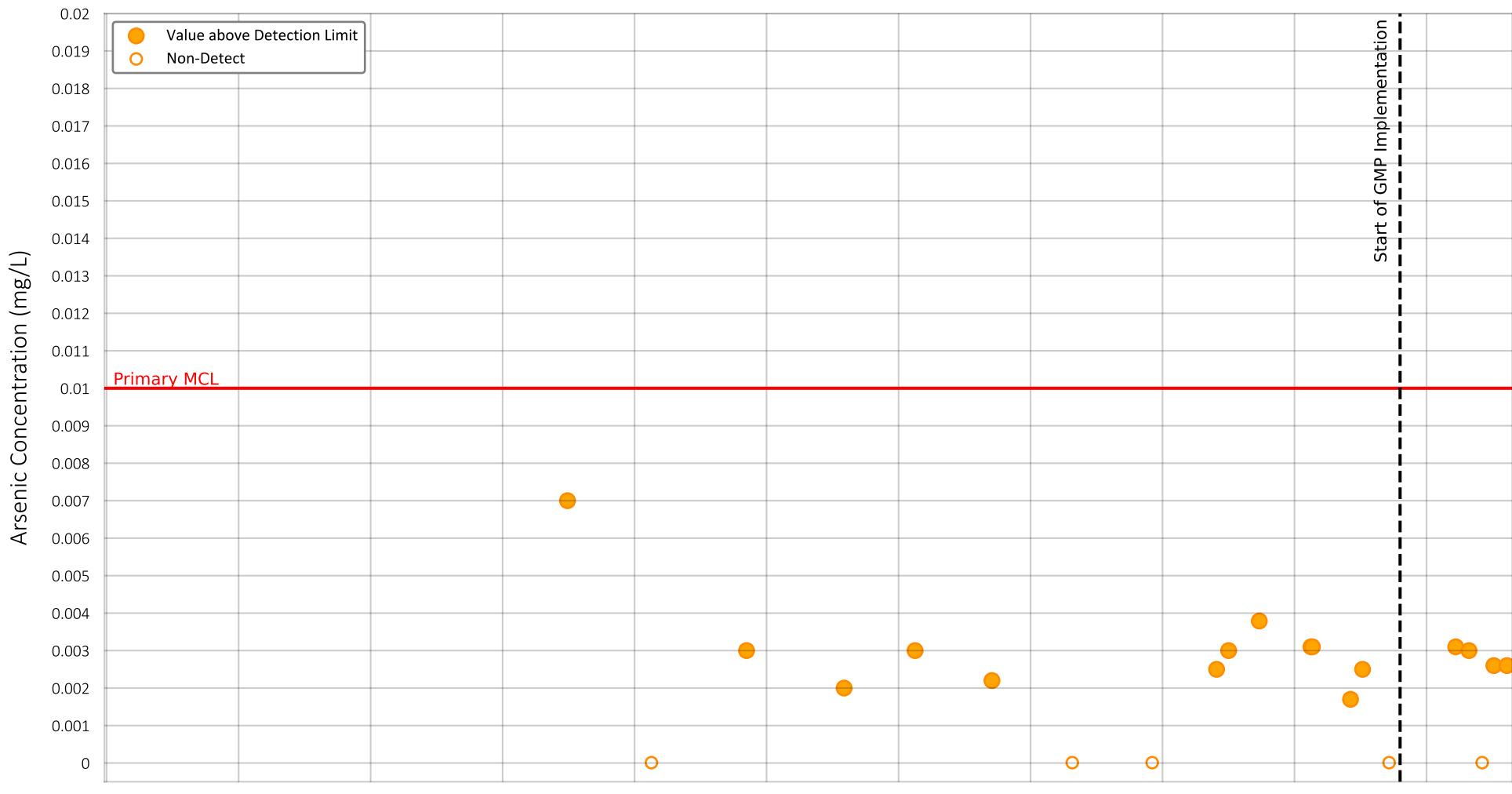


Prepared by:



Arsenic Concentration  
 Well Name: ID4-18  
 State Well ID: 010S006E18J001S  
 Well Depth (ft): 570  
 Perforated Interval (ft): 240 - 560

Figure G-5



Location of Well in Borrego Springs

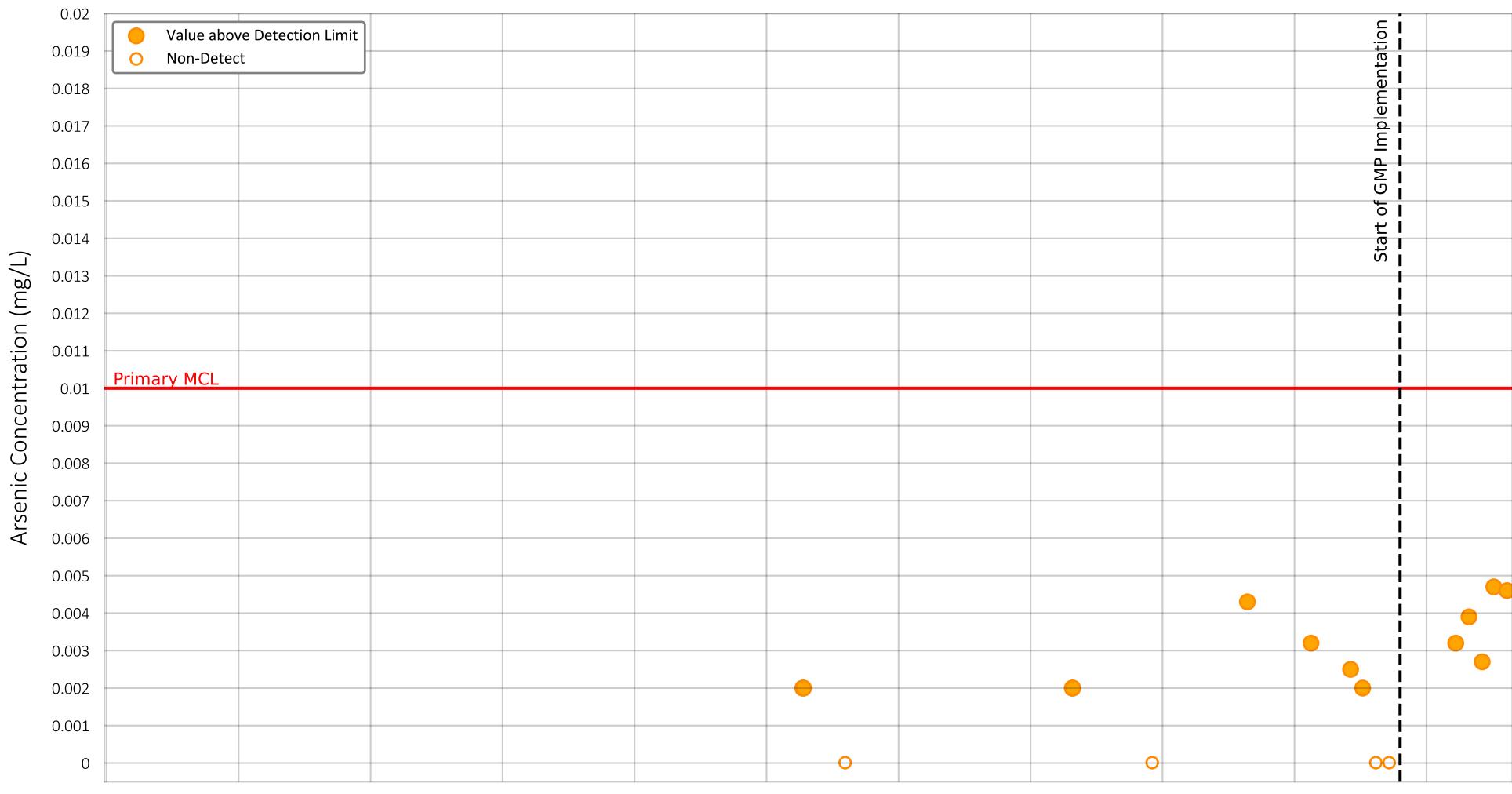


Prepared by:



Arsenic Concentration  
 Well Name: ID1-12  
 State Well ID: 011S006E16A002S  
 Well Depth (ft): 580  
 Perforated Interval (ft): 248 - 568

Figure G-6



Location of Well in Borrego Springs

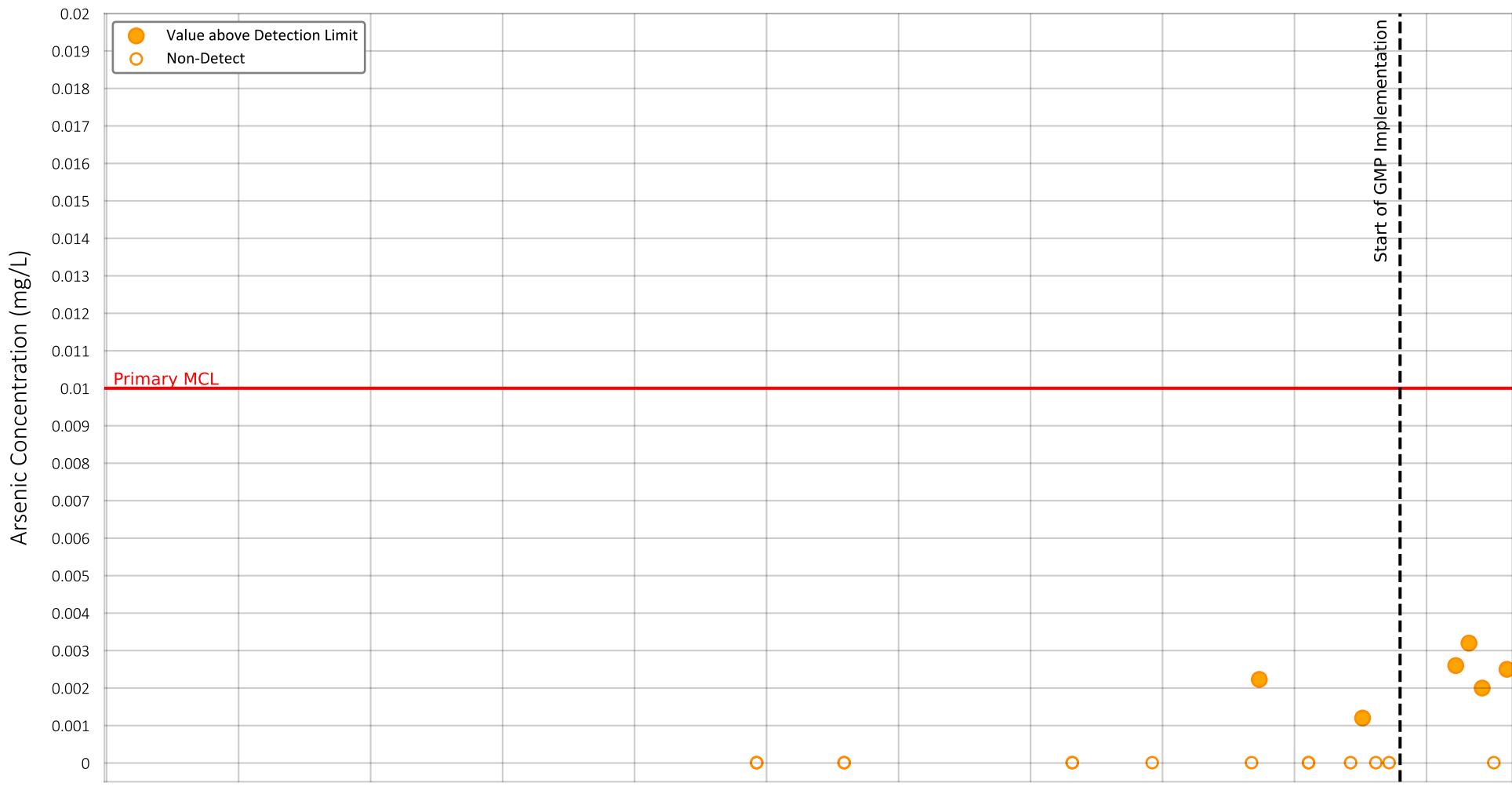


Prepared by:



Arsenic Concentration  
Well Name: ID1-16  
State Well ID: 011S006E16N001S  
Well Depth (ft): 705  
Perforated Interval (ft): 160 - 549

Figure G-7



Location of Well in Borrego Springs



Prepared by:



Arsenic Concentration  
 Well Name: ID4-11  
 State Well ID: 010S006E32D001S  
 Well Depth (ft): 770  
 Perforated Interval (ft): 450 - 760

Figure G-8



Location of Well in Borrego Springs



Prepared by:



Arsenic Concentration  
 Well Name: ID5-5  
 State Well ID: 011S006E09E001S  
 Well Depth (ft): 700  
 Perforated Interval (ft): 400 - 700

Figure G-9



Location of Well in Borrego Springs

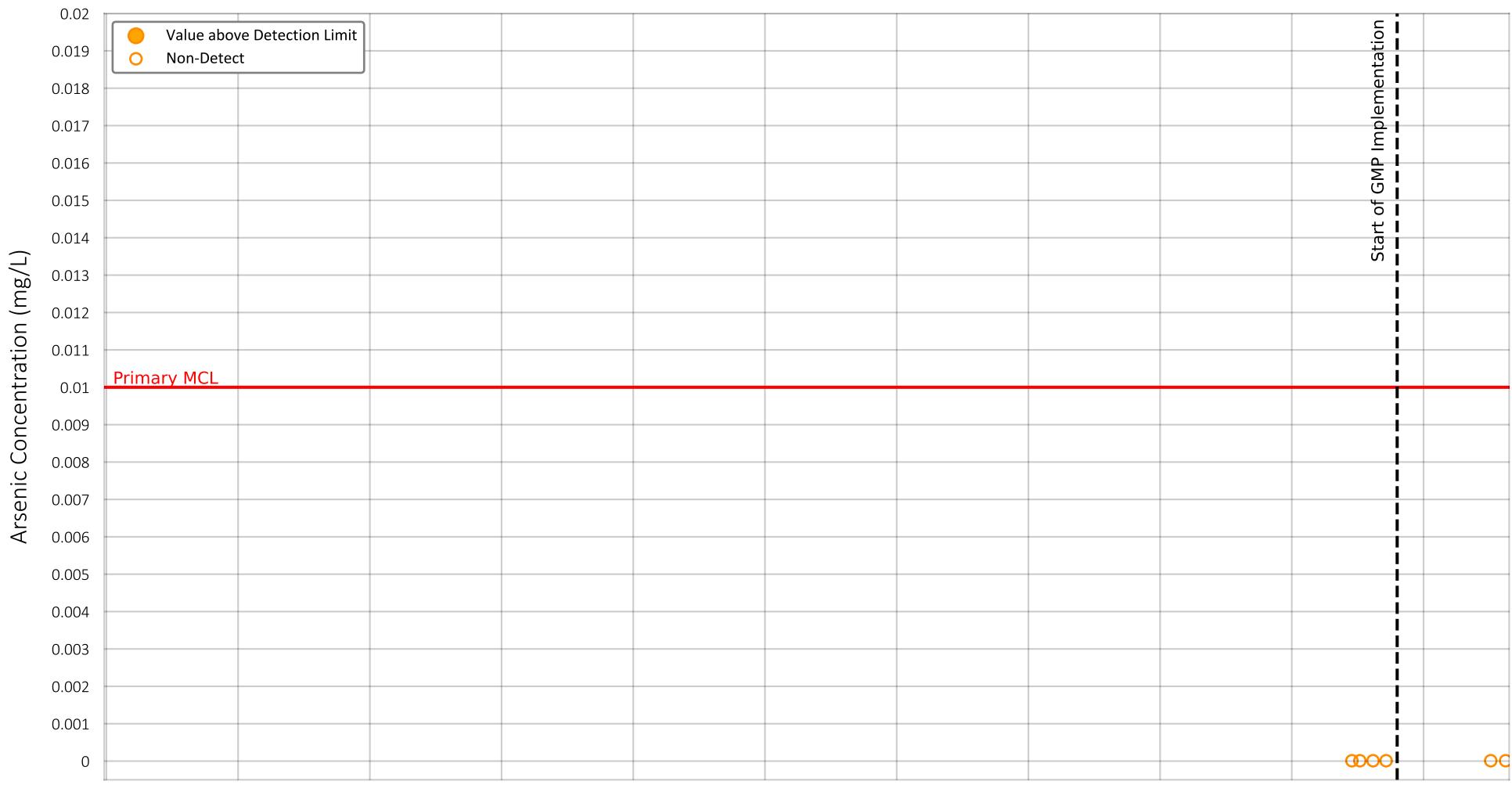


Prepared by:



Arsenic Concentration  
Well Name: MW-3  
State Well ID: 011S006E23J002S  
Well Depth (ft): 325  
Perforated Interval (ft): 175 - 331

Figure G-10



Location of Well in Borrego Springs

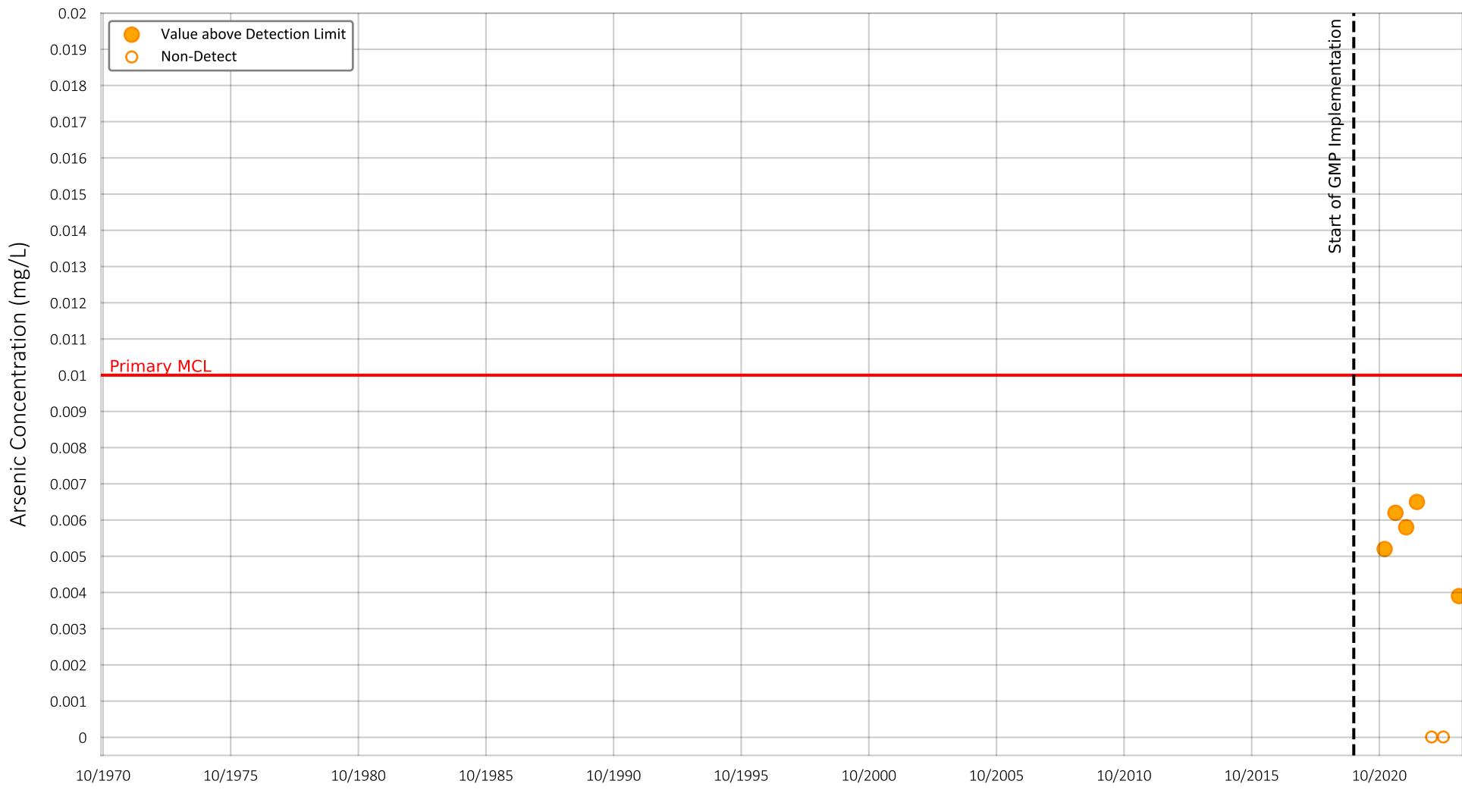


Prepared by:



Arsenic Concentration Well  
 Name: Fortiner  
 State Well ID: 010S006E09N001S  
 Well Depth (ft): 560  
 Perforated Interval (ft): 250 - 607

Figure G-11



Location of Well in Borrego Springs



Prepared by:



Arsenic Concentration  
 Well Name: Air Ranch Well 4  
 State Well ID: 011S007E30L001S  
 Well Depth (ft): 380  
 Perforated Interval (ft): 120 - 380

Figure G-12



Location of Well in Borrego Springs



Prepared by:



Arsenic Concentration  
 Well Name: MW-5A (East-Lower)  
 State Well ID: 011S007E07R001S  
 Well Depth (ft): 345  
 Perforated Interval (ft): 50 - 160

Figure G-13



Location of Well in Borrego Springs



Prepared by:



Arsenic Concentration  
 Well Name: MW-5B (West-Upper)  
 State Well ID: 011S007E07R002S  
 Well Depth (ft): 160  
 Perforated Interval (ft): 45 - 340

Figure G-14



Location of Well in Borrego Springs

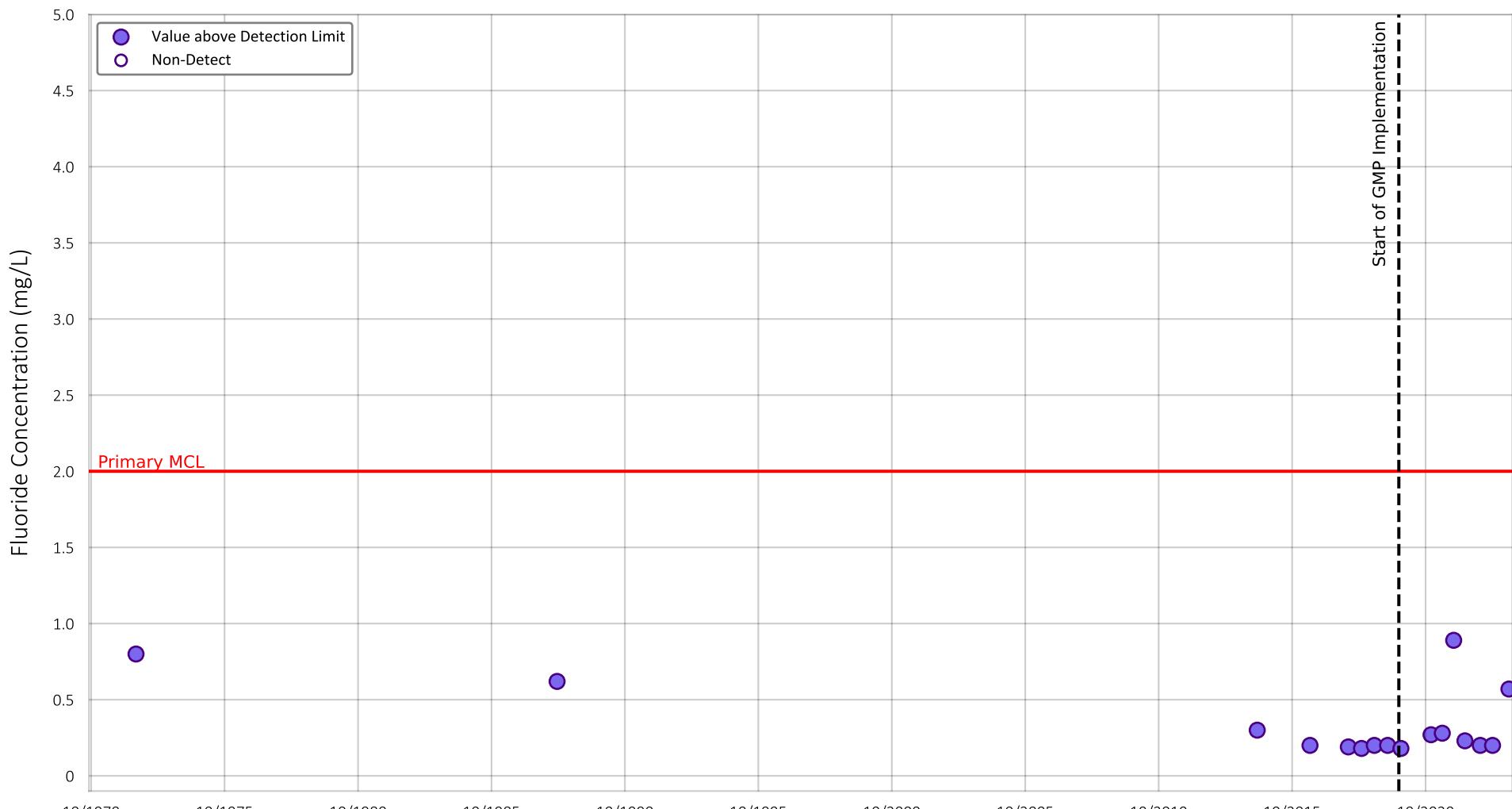


Prepared by:



Arsenic Concentration  
Well Name: MW-1  
State Well ID: 010S006E21A002S  
Well Depth (ft): 900  
Perforated Interval (ft): 800 - 890

Figure G-15



Location of Well in Borrego Springs

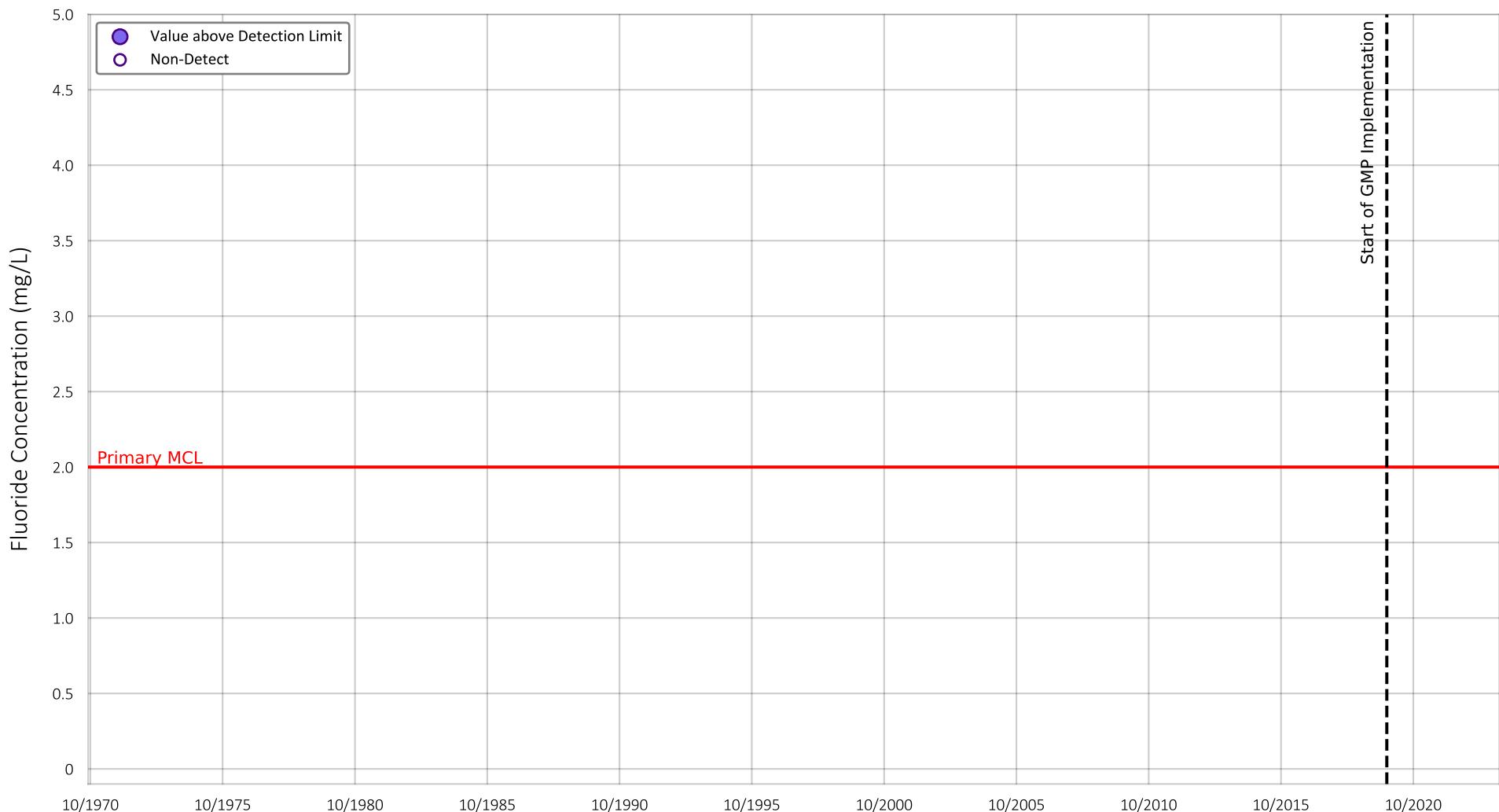


Prepared by:



Fluoride Concentration  
 Well Name: RH-1 (ID1-1)  
 State Well ID: 011S006E25A001S  
 Well Depth (ft): 600  
 Perforated Interval (ft): 180 - 580

Figure G-16



Location of Well in Borrego Springs

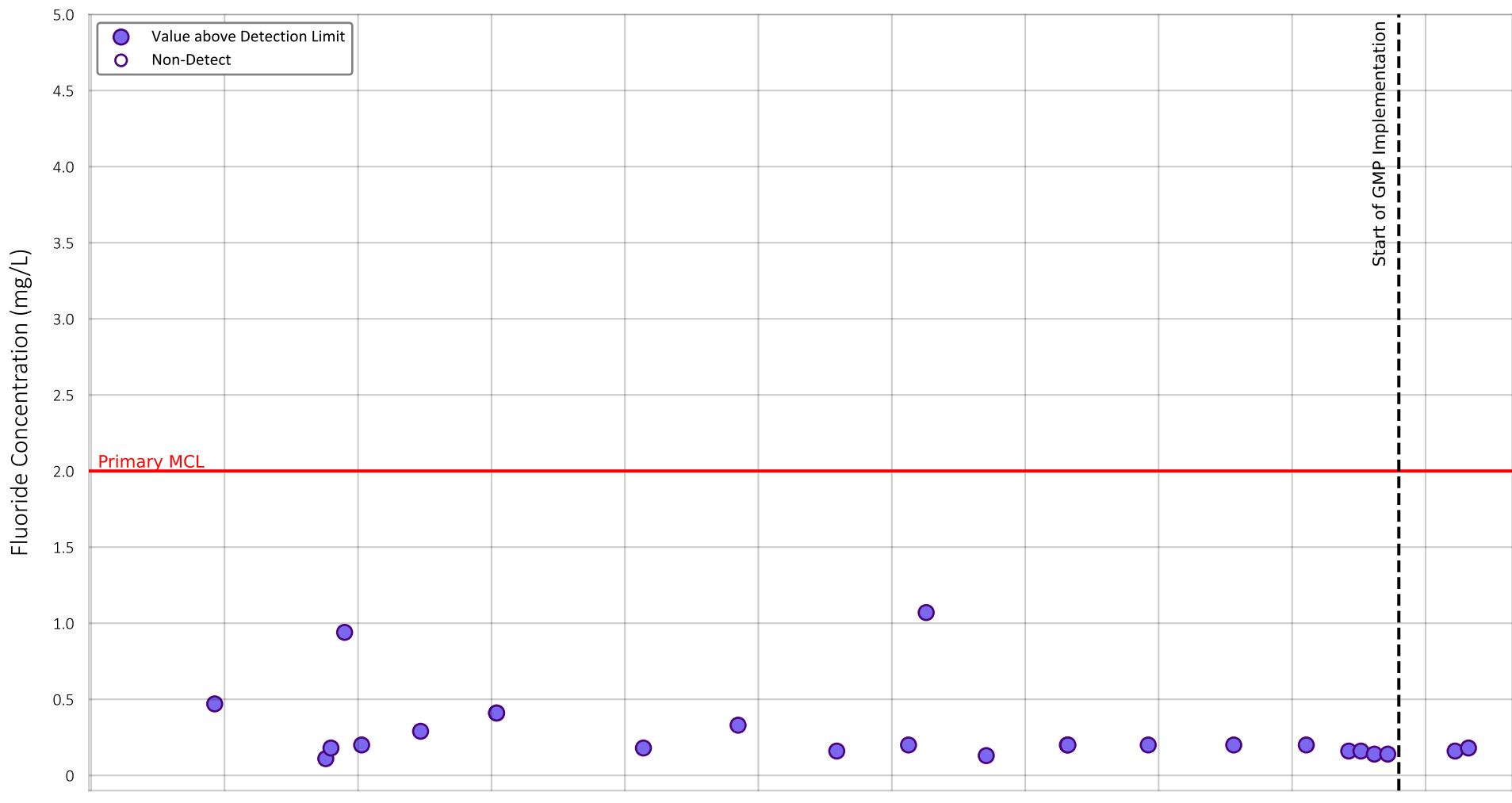


Prepared by:



Fluoride Concentration  
Well Name: ID4-3  
State Well ID: 010S006E18R001S  
Well Depth (ft): 621  
Perforated Interval (ft): no data - no data

Figure G-17



Location of Well in Borrego Springs

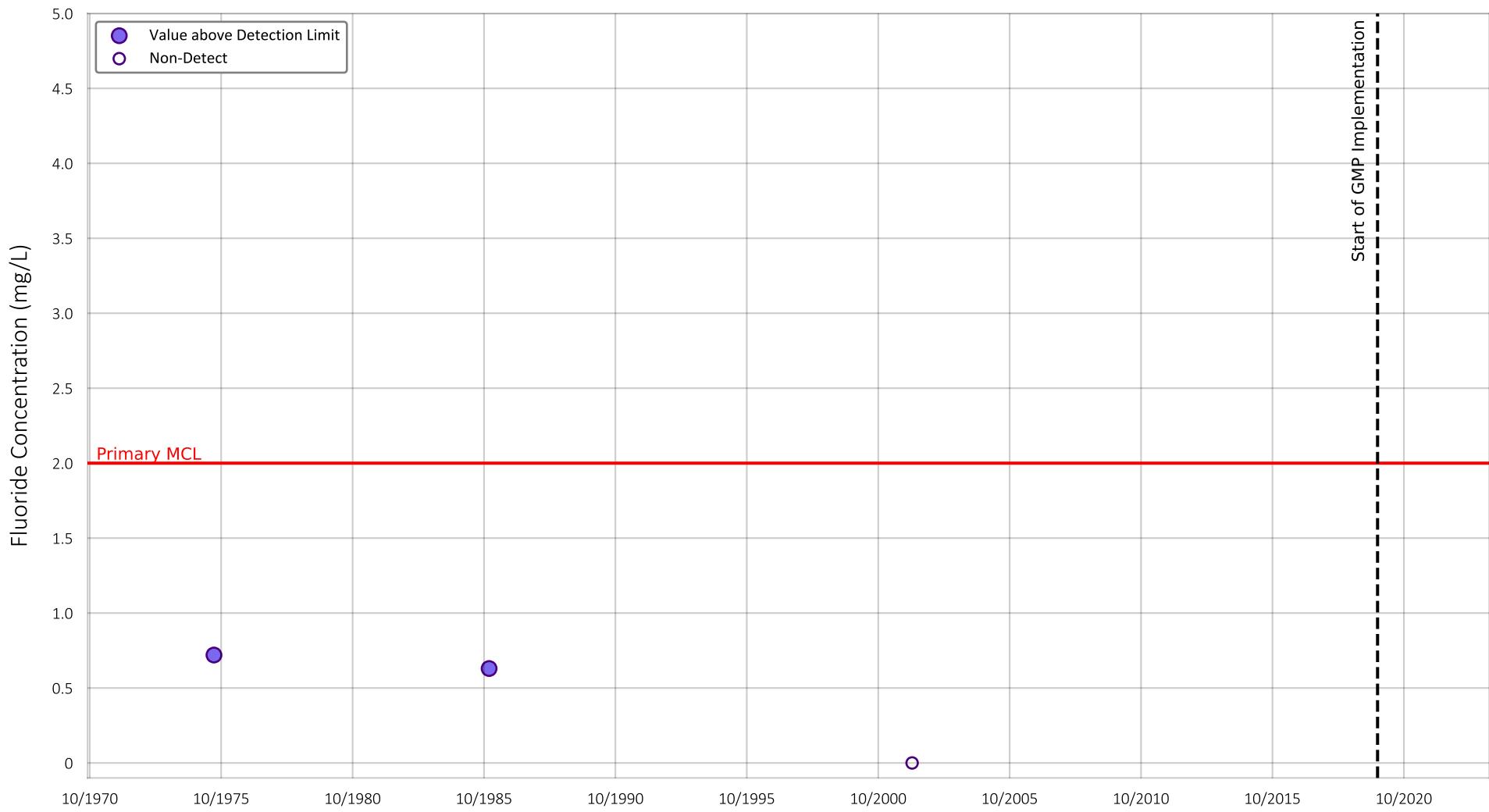


Prepared by:

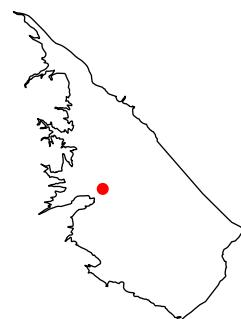


Fluoride Concentration  
 Well Name: ID4-4  
 State Well ID: 010S006E29K002S  
 Well Depth (ft): 802  
 Perforated Interval (ft): 470 - 786

Figure G-18



Location of Well in Borrego Springs

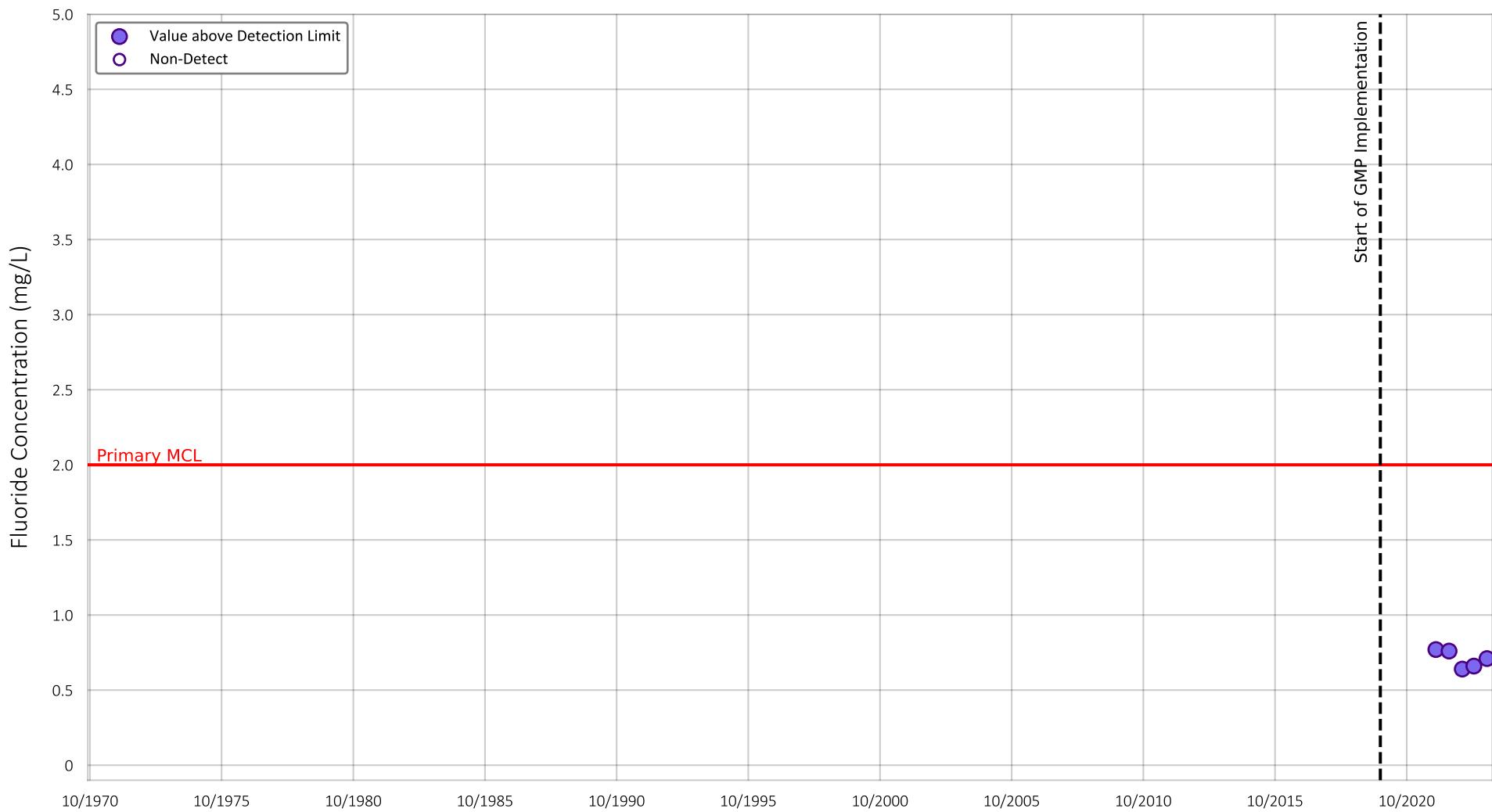


Prepared by:



Fluoride Concentration  
 Well Name: ID4-1  
 State Well ID: 010S006E32R001S  
 Well Depth (ft): no data  
 Perforated Interval (ft): no data - no data

Figure G-19



Location of Well in Borrego Springs

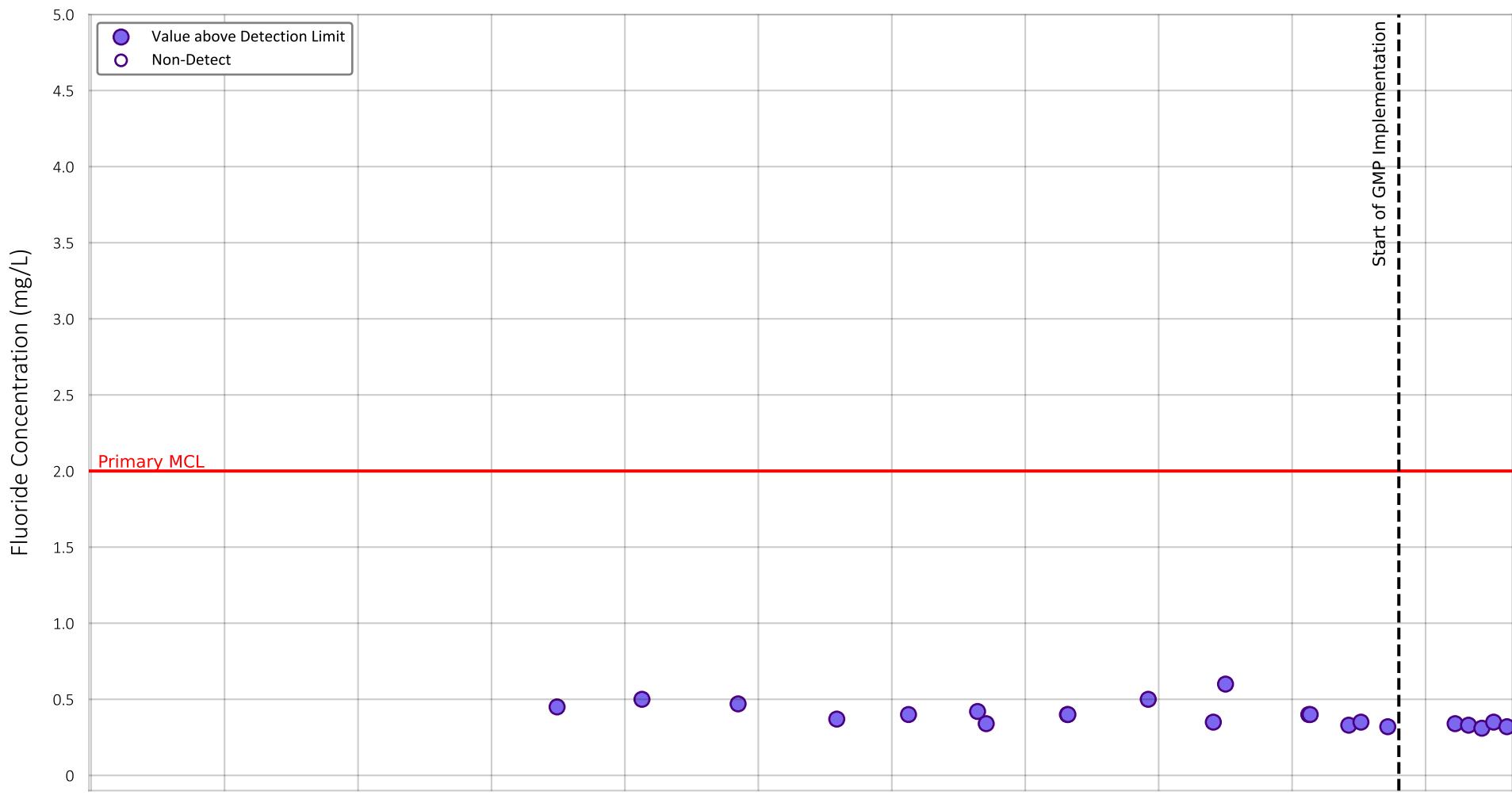


Prepared by:



Fluoride Concentration  
 Well Name: ID4-18  
 State Well ID: 010S006E18J001S  
 Well Depth (ft): 570  
 Perforated Interval (ft): 240 - 560

Figure G-20



Location of Well in Borrego Springs

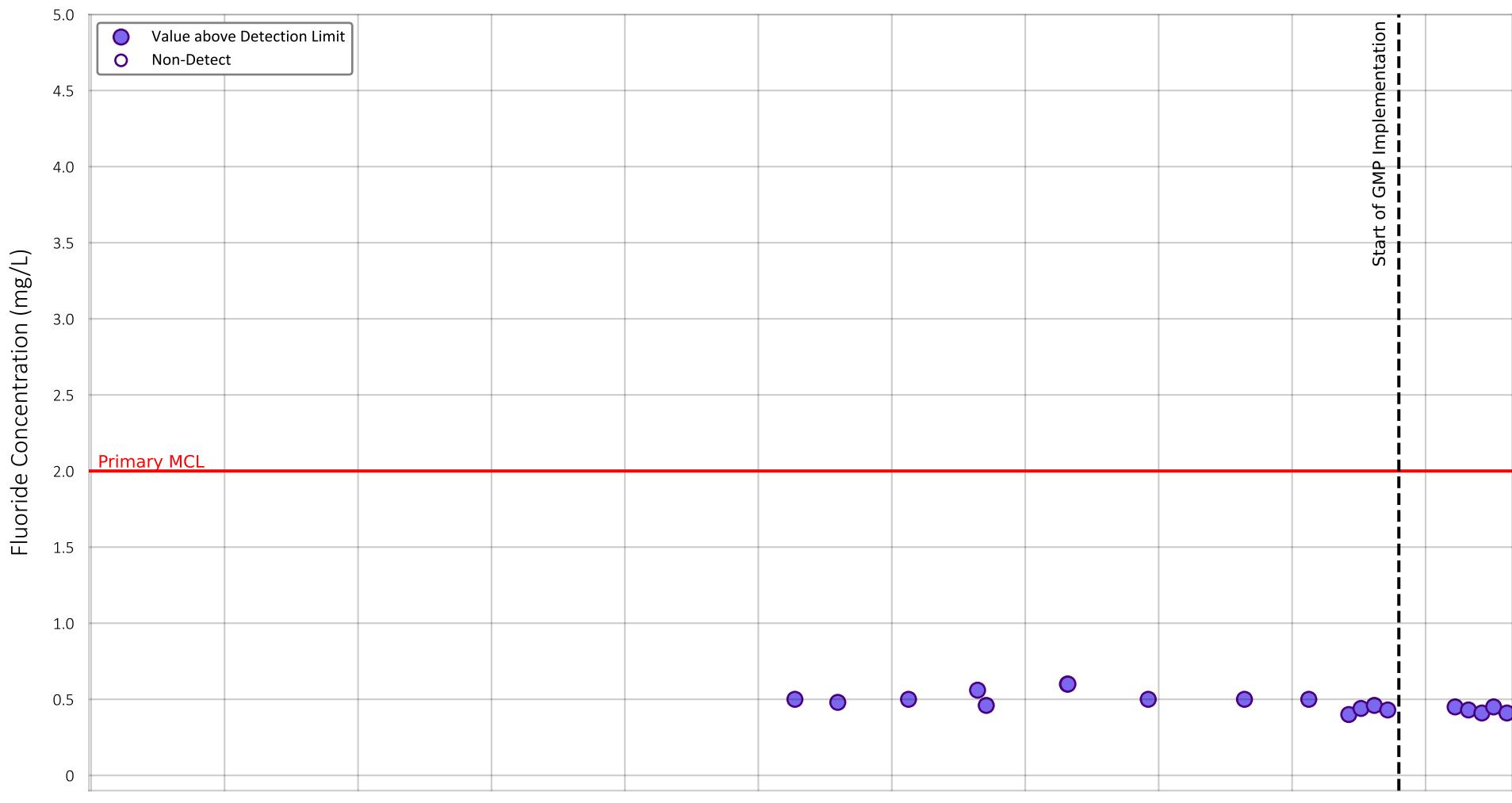


Prepared by:



Fluoride Concentration  
 Well Name: ID1-12  
 State Well ID: 011S006E16A002S  
 Well Depth (ft): 580  
 Perforated Interval (ft): 248 - 568

Figure G-21



Location of Well in Borrego Springs

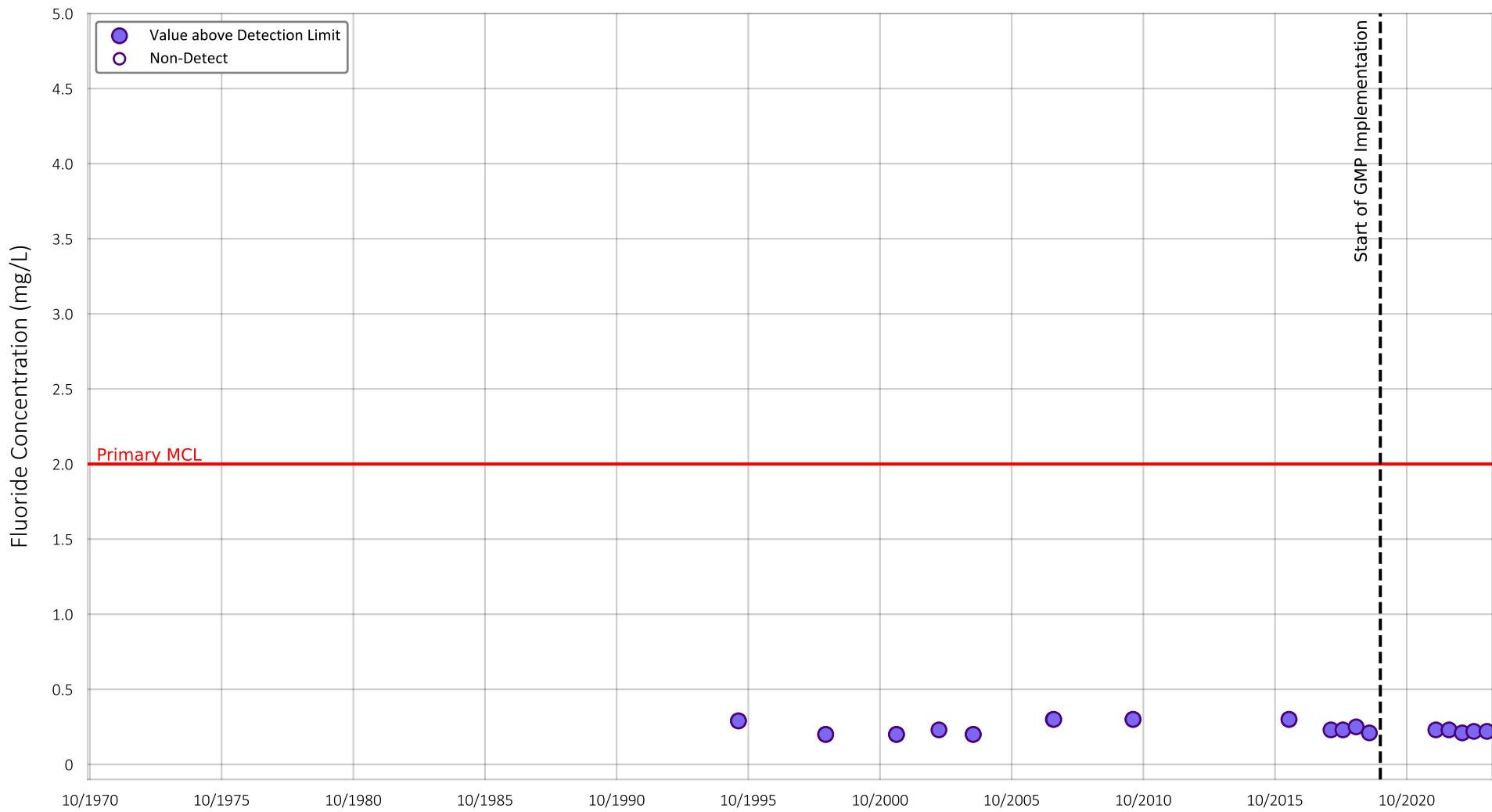


Prepared by:



Fluoride Concentration  
 Well Name: ID1-16  
 State Well ID: 011S006E16N001S  
 Well Depth (ft): 705  
 Perforated Interval (ft): 160 - 549

Figure G-22



Location of Well in Borrego Springs

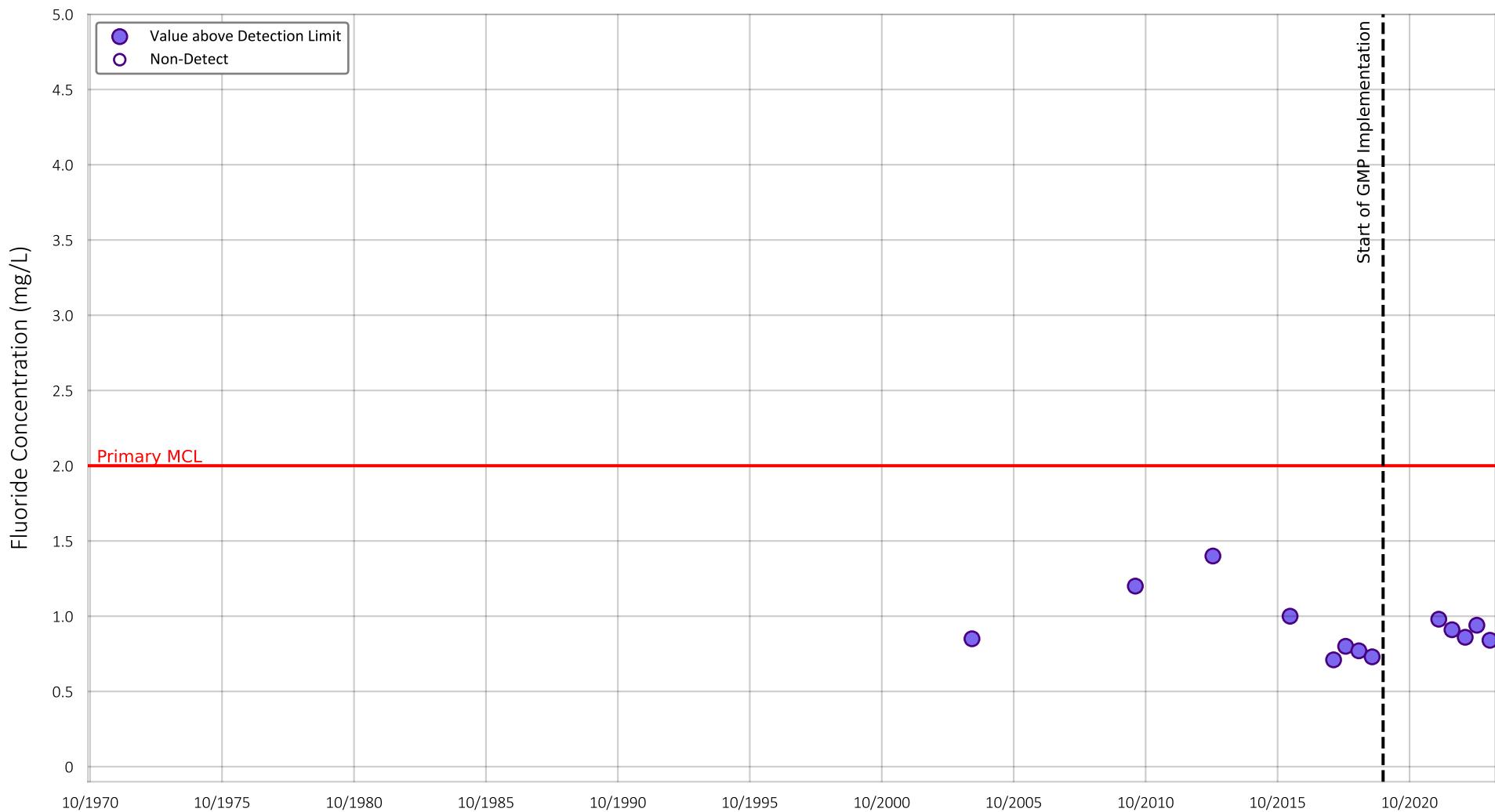


Prepared by:



Fluoride Concentration  
 Well Name: ID4-11  
 State Well ID: 010S006E32D001S  
 Well Depth (ft): 770  
 Perforated Interval (ft): 450 - 760

Figure G-23



Location of Well in Borrego Springs

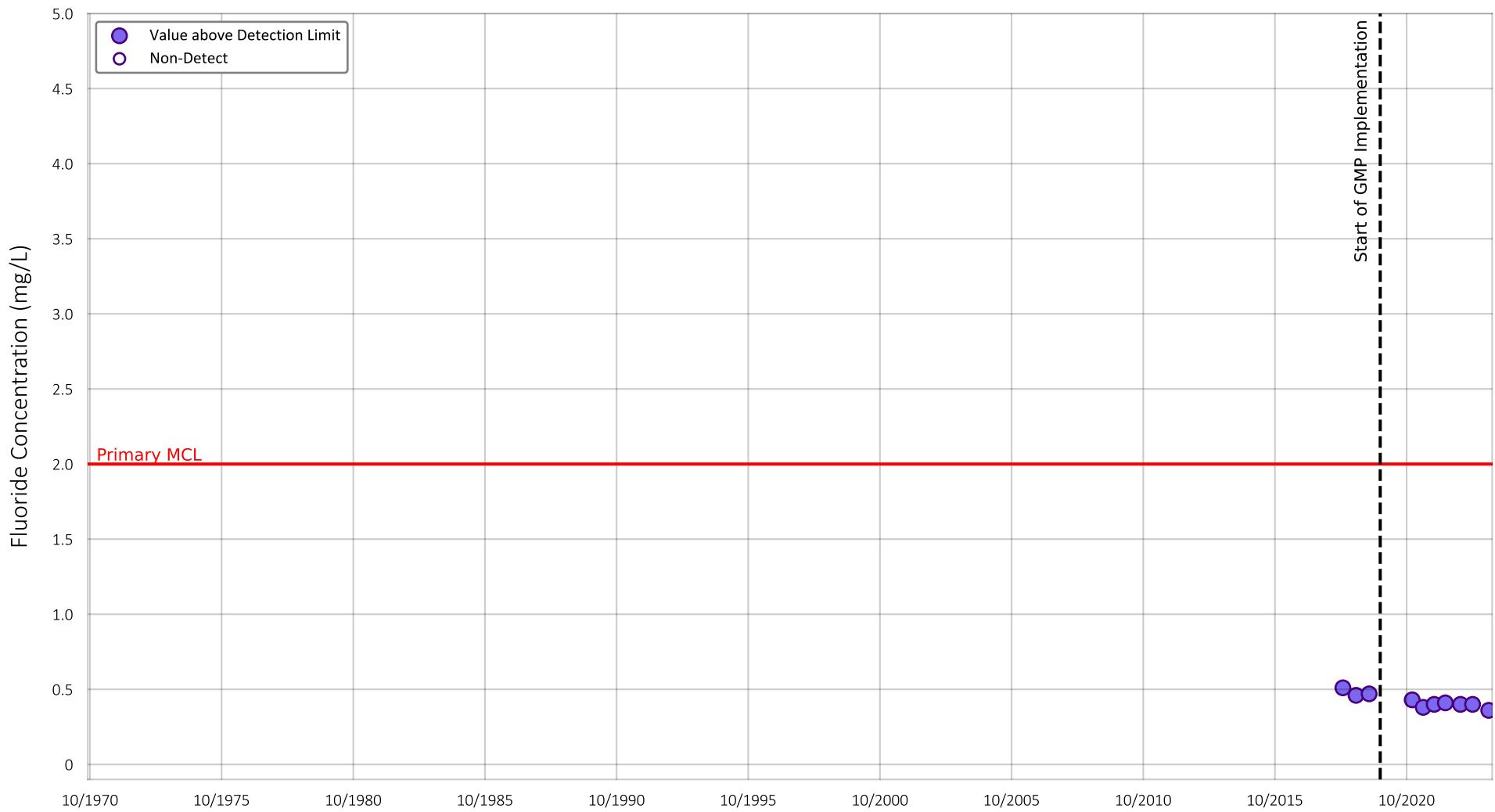


Prepared by:



Fluoride Concentration  
Well Name: ID5-5  
State Well ID: 011S006E09E001S  
Well Depth (ft): 700  
Perforated Interval (ft): 400 - 700

Figure G-24



Location of Well in Borrego Springs

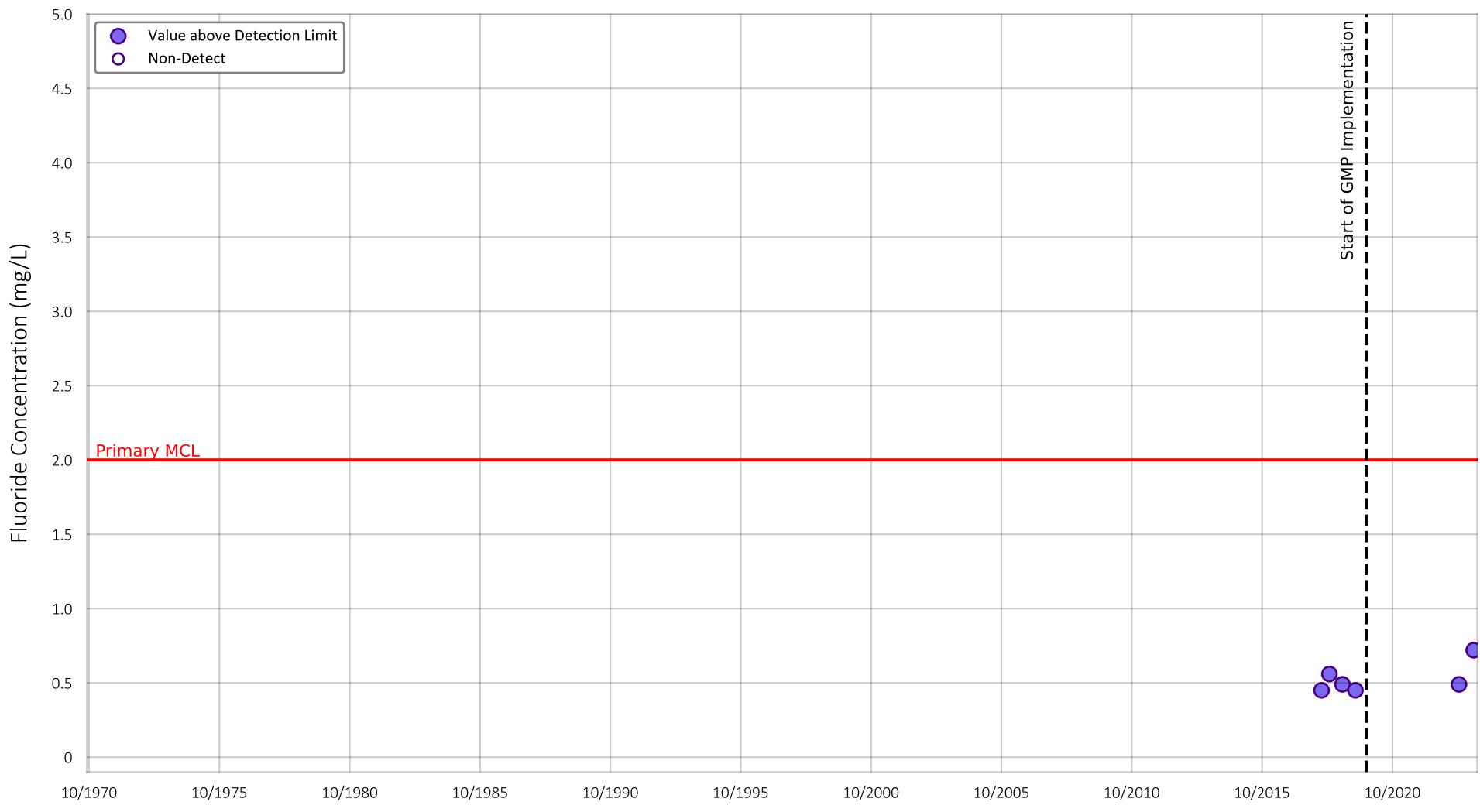


Prepared by:

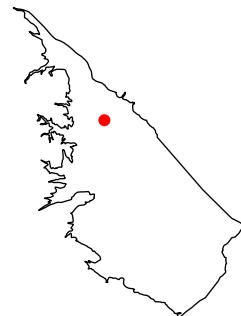


Fluoride Concentration  
 Well Name: MW-3  
 State Well ID: 011S006E23J002S  
 Well Depth (ft): 325  
 Perforated Interval (ft): 175 - 331

Figure G-25



Location of Well in Borrego Springs

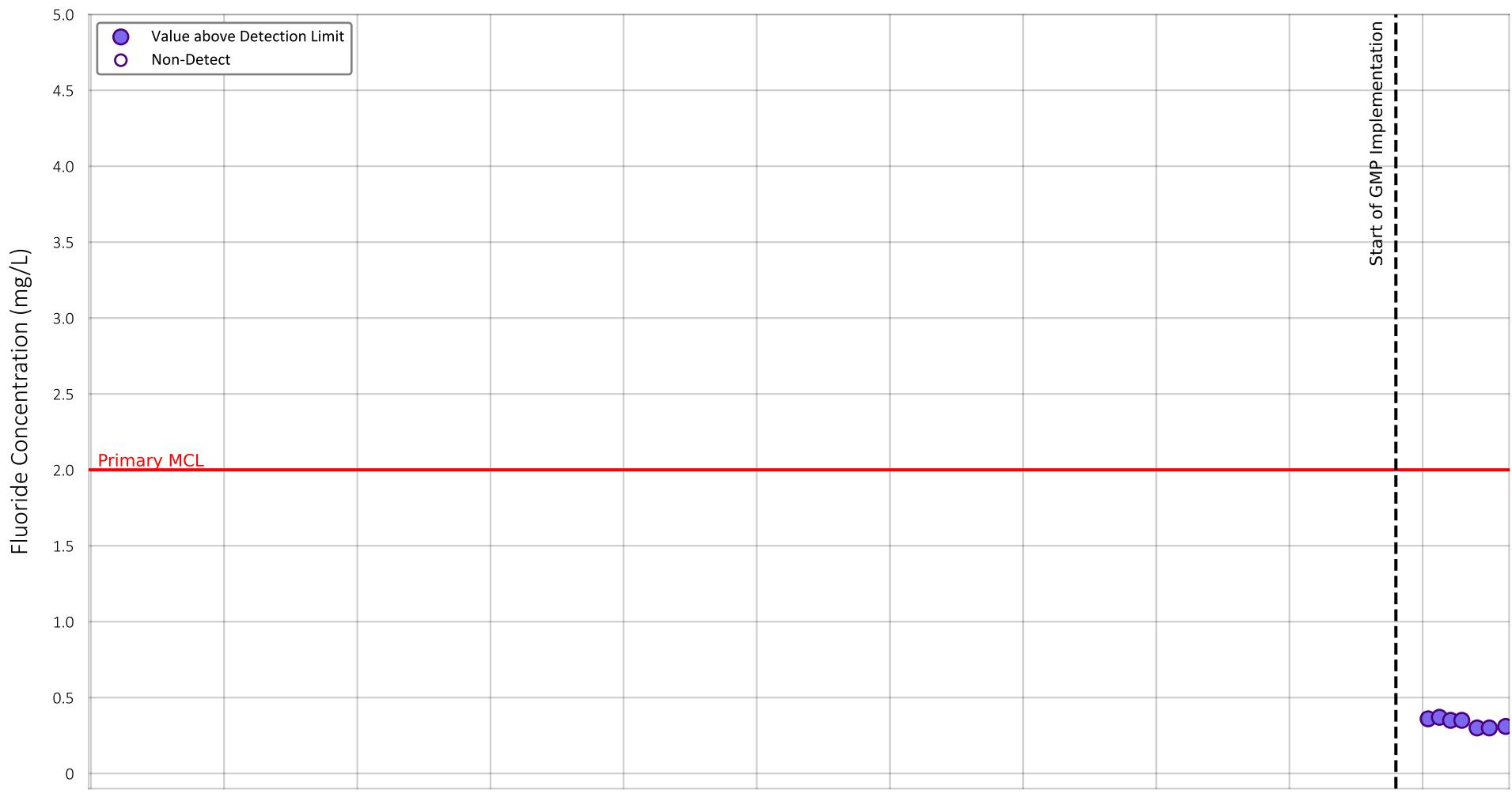


Prepared by:



Fluoride Concentration  
 Well Name: Fortiner  
 State Well ID: 010S006E09N001S  
 Well Depth (ft): 560  
 Perforated Interval (ft): 250 - 607

Figure G-26



Location of Well in Borrego Springs

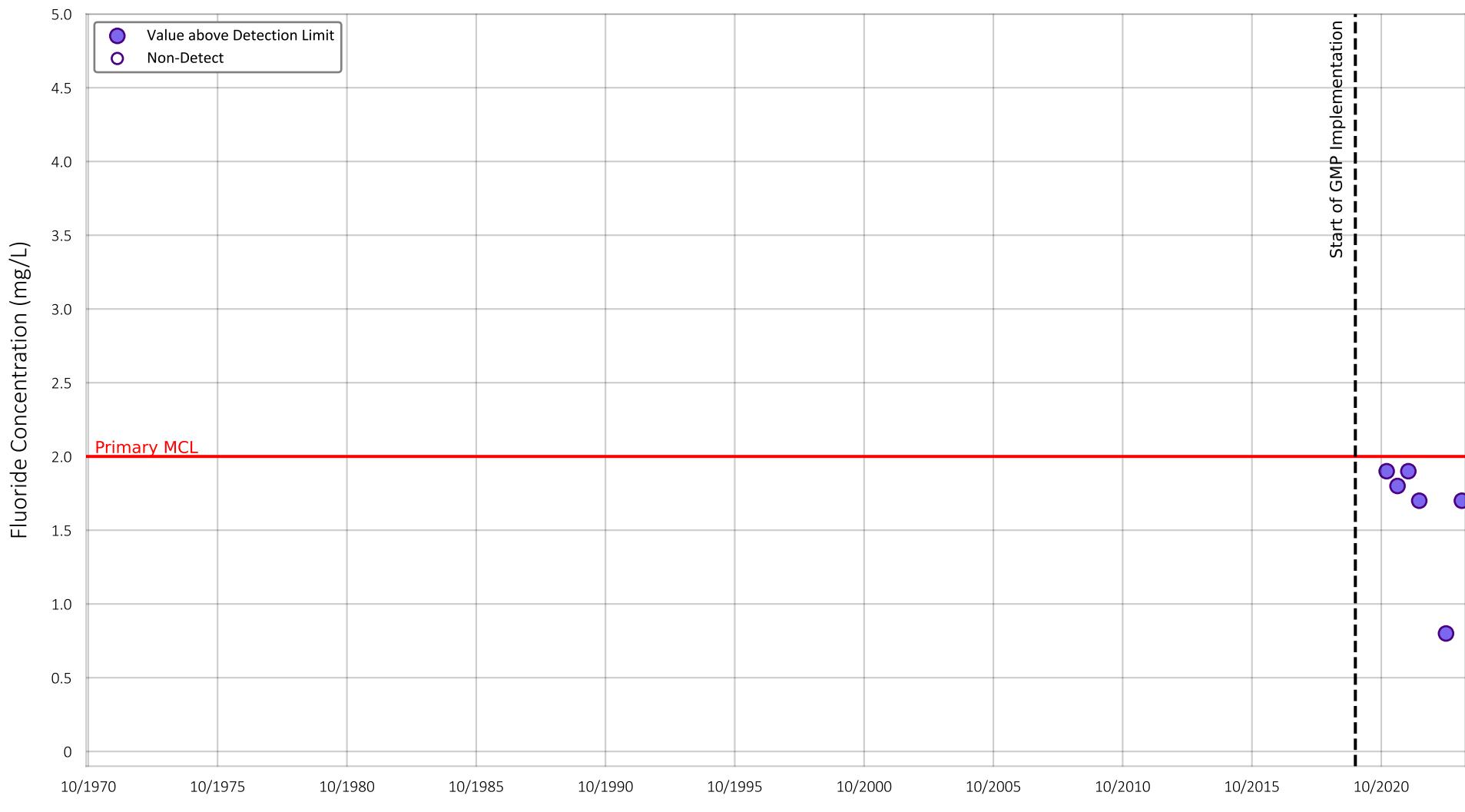


Prepared by:

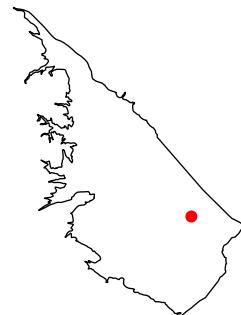


Fluoride Concentration  
 Well Name: Air Ranch Well 4  
 State Well ID: 011S007E30L001S  
 Well Depth (ft): 380  
 Perforated Interval (ft): 120 - 380

Figure G-27



Location of Well in Borrego Springs

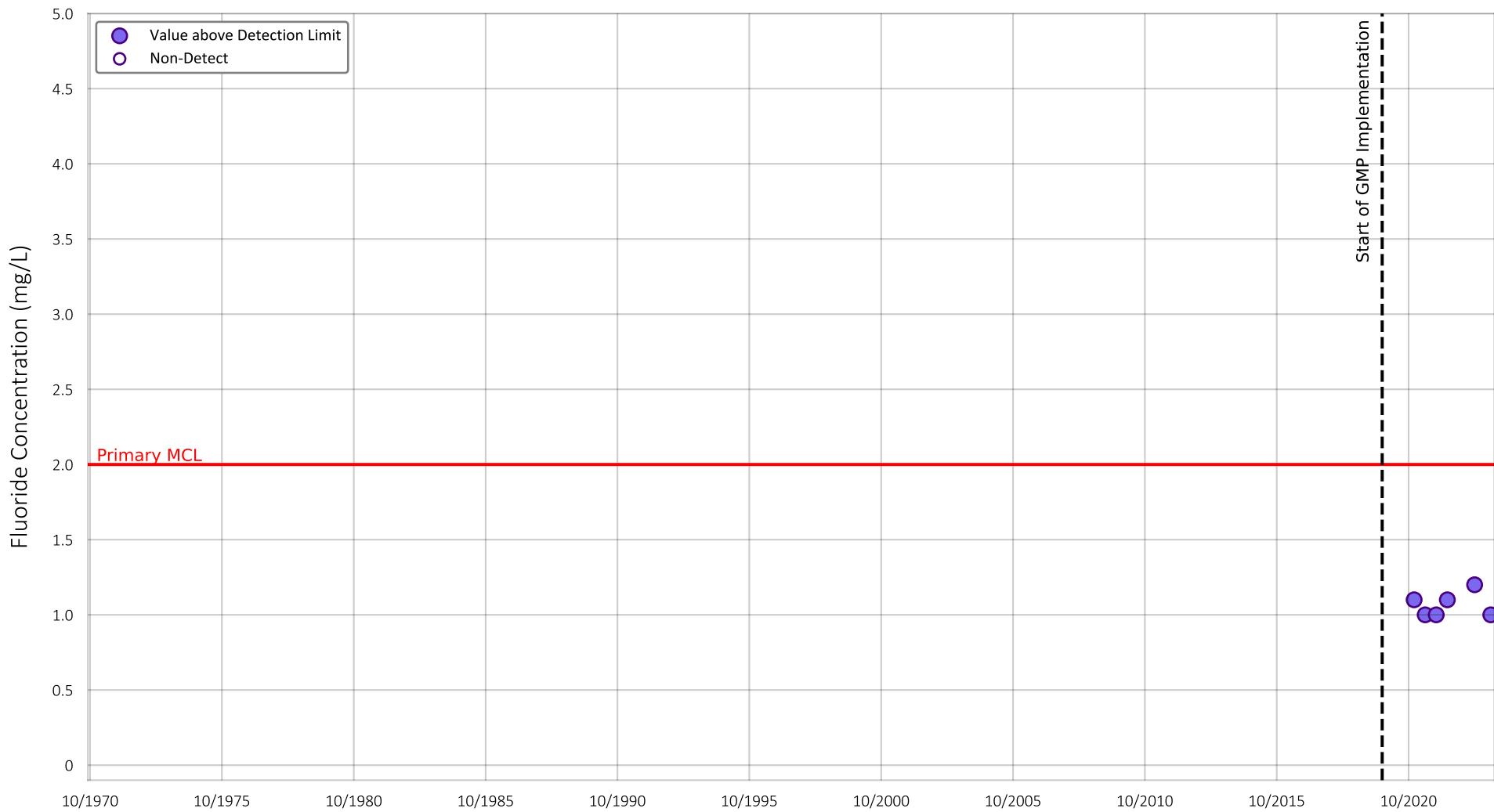


Prepared by:



Fluoride Concentration  
 Well Name: MW-5A (East-Lower)  
 State Well ID: 011S007E07R001S  
 Well Depth (ft): 345  
 Perforated Interval (ft): 50 - 160

Figure G-28



Location of Well in Borrego Springs

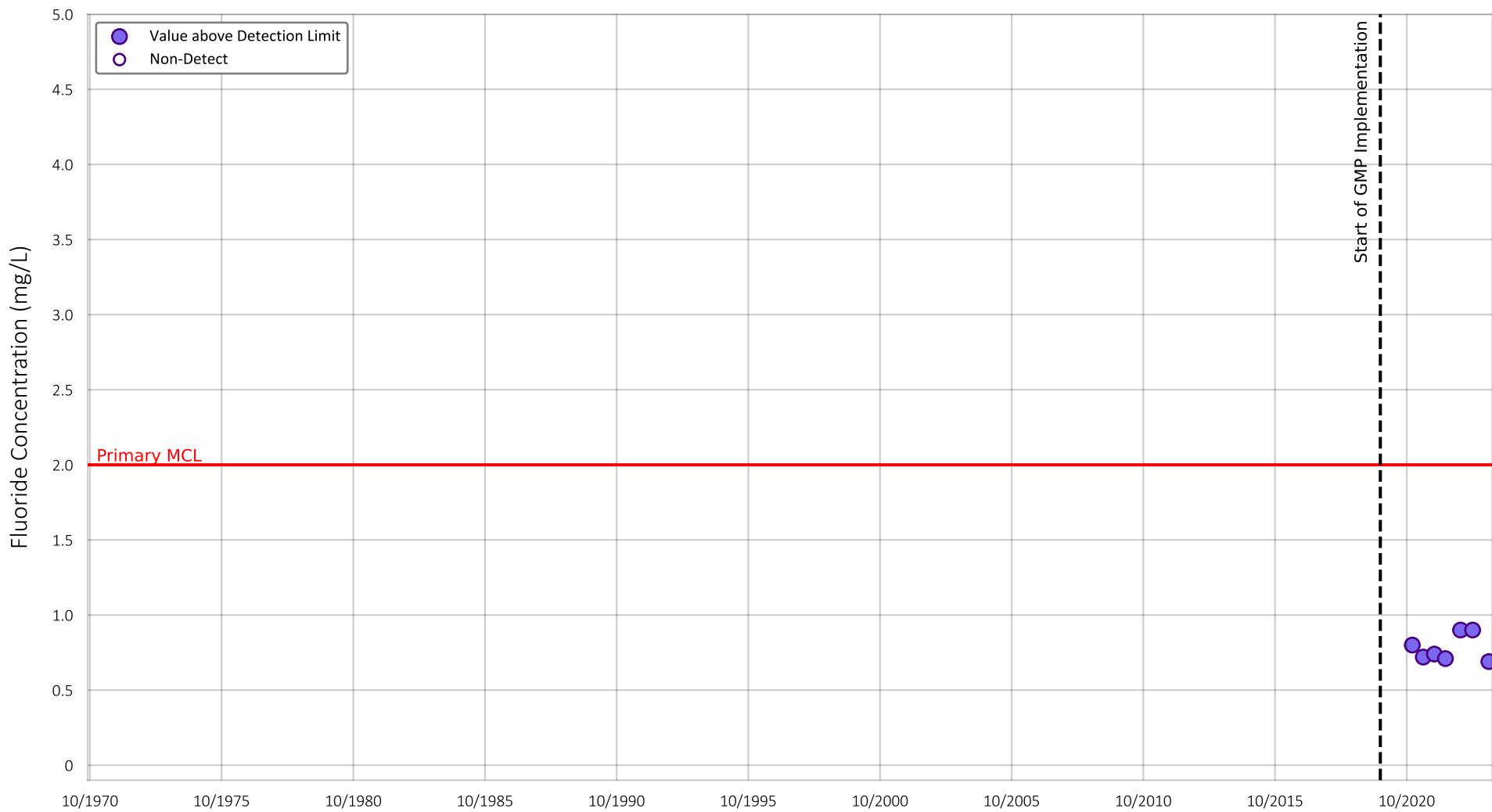


Prepared by:



Fluoride Concentration  
 Well Name: MW-5B (West-Upper)  
 State Well ID: 011S007E07R002S  
 Well Depth (ft): 160  
 Perforated Interval (ft): 45 - 340

Figure G-29



Location of Well in Borrego Springs

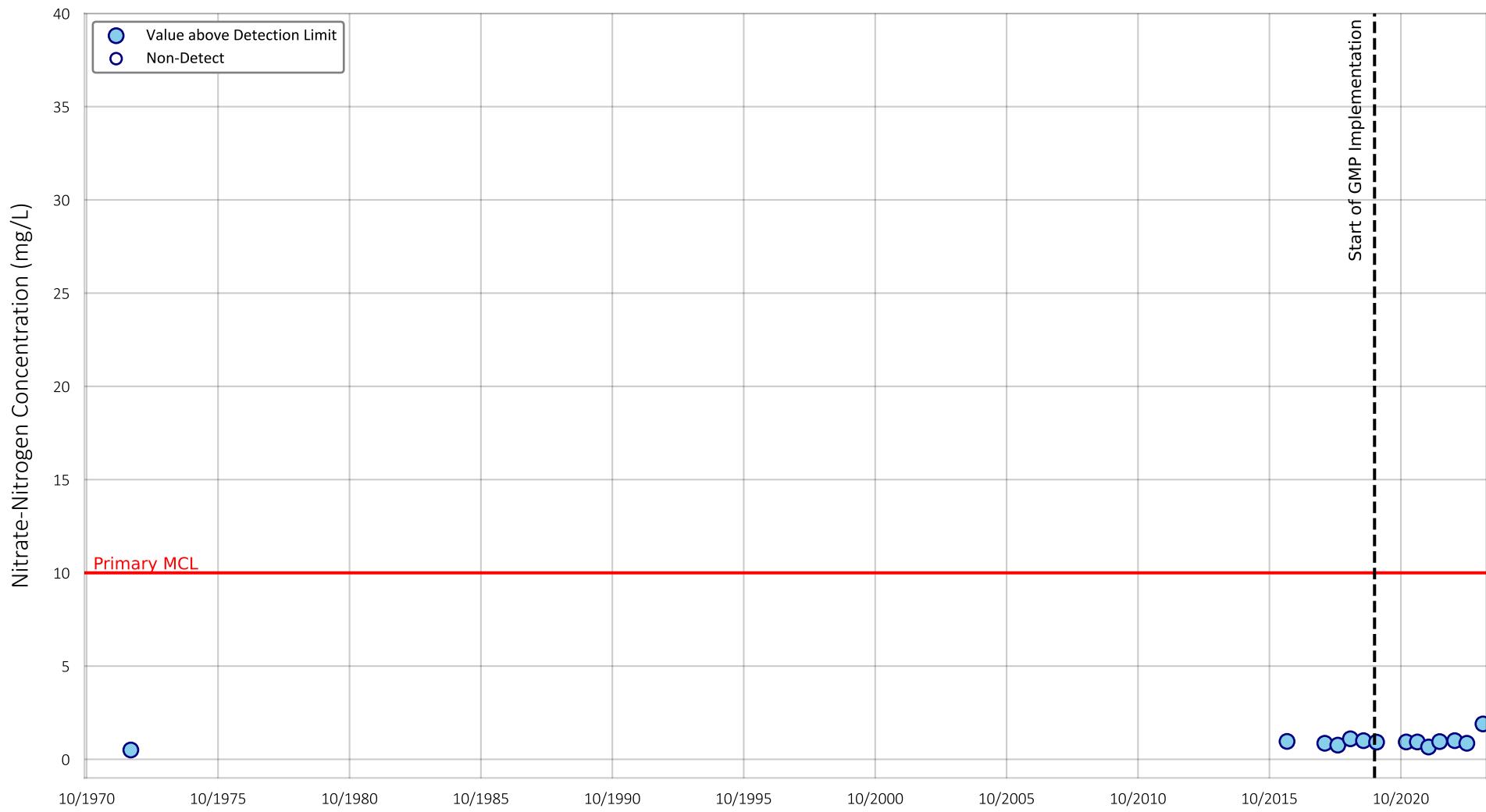


Prepared by:



Fluoride Concentration  
 Well Name: MW-1  
 State Well ID: 010S006E21A002S  
 Well Depth (ft): 900  
 Perforated Interval (ft): 800 - 890

Figure G-30



Location of Well in Borrego Springs

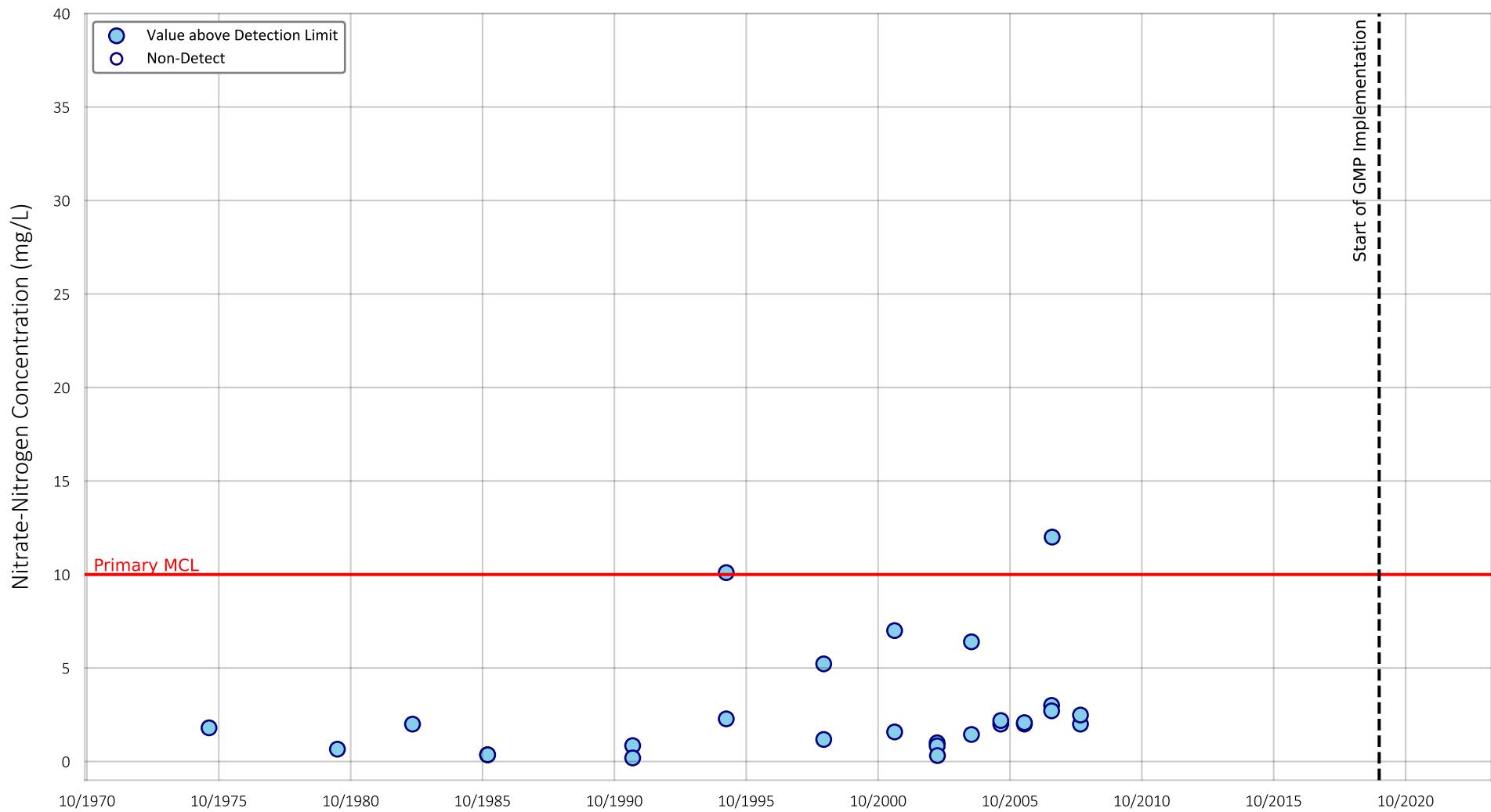


Prepared by:



Nitrate-Nitrogen Concentration  
 Well Name: RH-1 (ID1-1)  
 State Well ID: 011S006E25A001S  
 Well Depth (ft): 600  
 Perforated Interval (ft): 180 - 580

Figure G-31



Location of Well in Borrego Springs

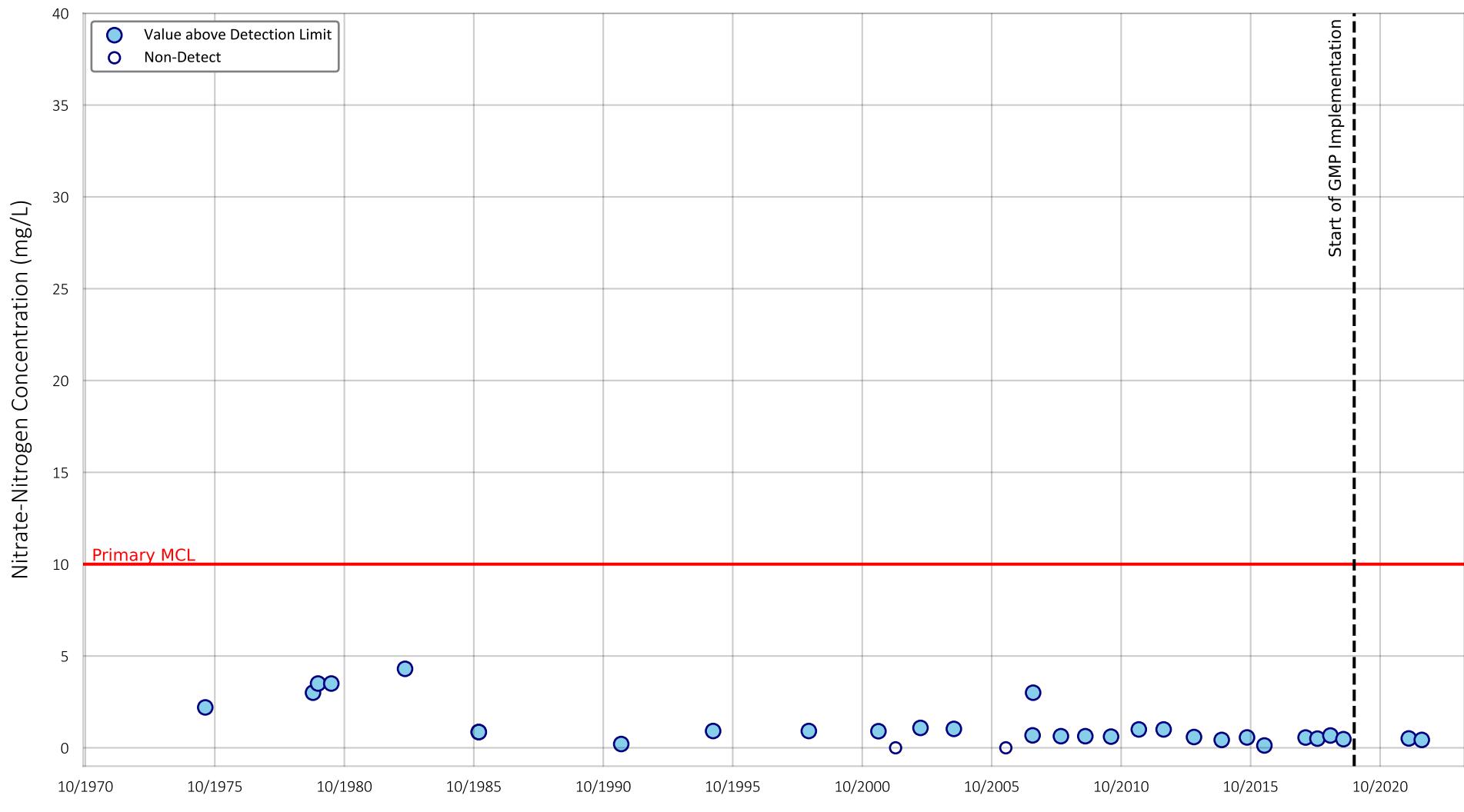


Prepared by:



Nitrate-Nitrogen Concentration  
Well Name: ID4-3  
State Well ID: 010S006E18R001S  
Well Depth (ft): 621  
Perforated Interval (ft): no data - no data

Figure G-32



Location of Well in Borrego Springs

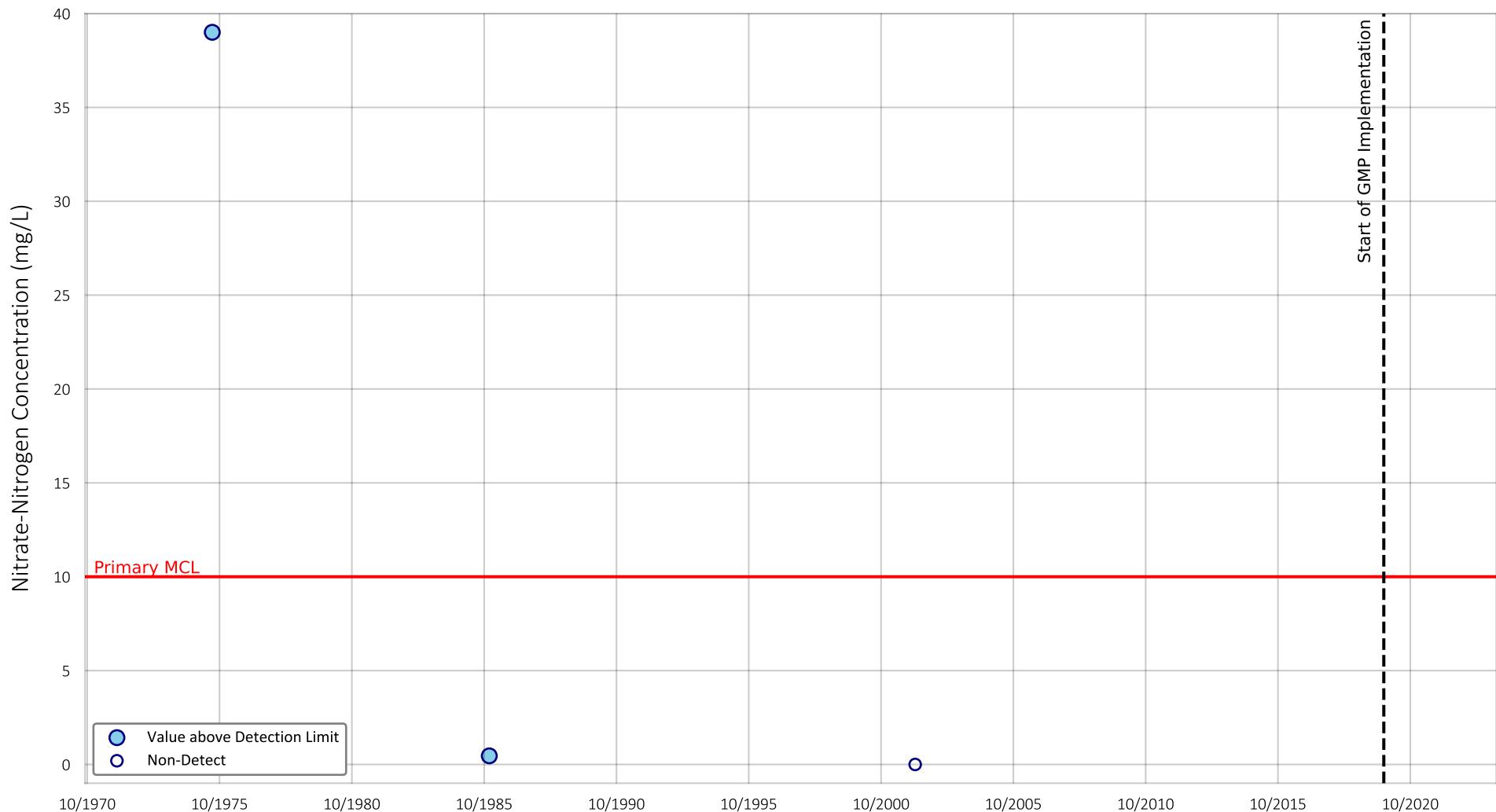


Prepared by:



Nitrate-Nitrogen Concentration  
 Well Name: ID4-4  
 State Well ID: 010S006E29K002S  
 Well Depth (ft): 802  
 Perforated Interval (ft): 470 - 786

Figure G-33



Location of Well in Borrego Springs

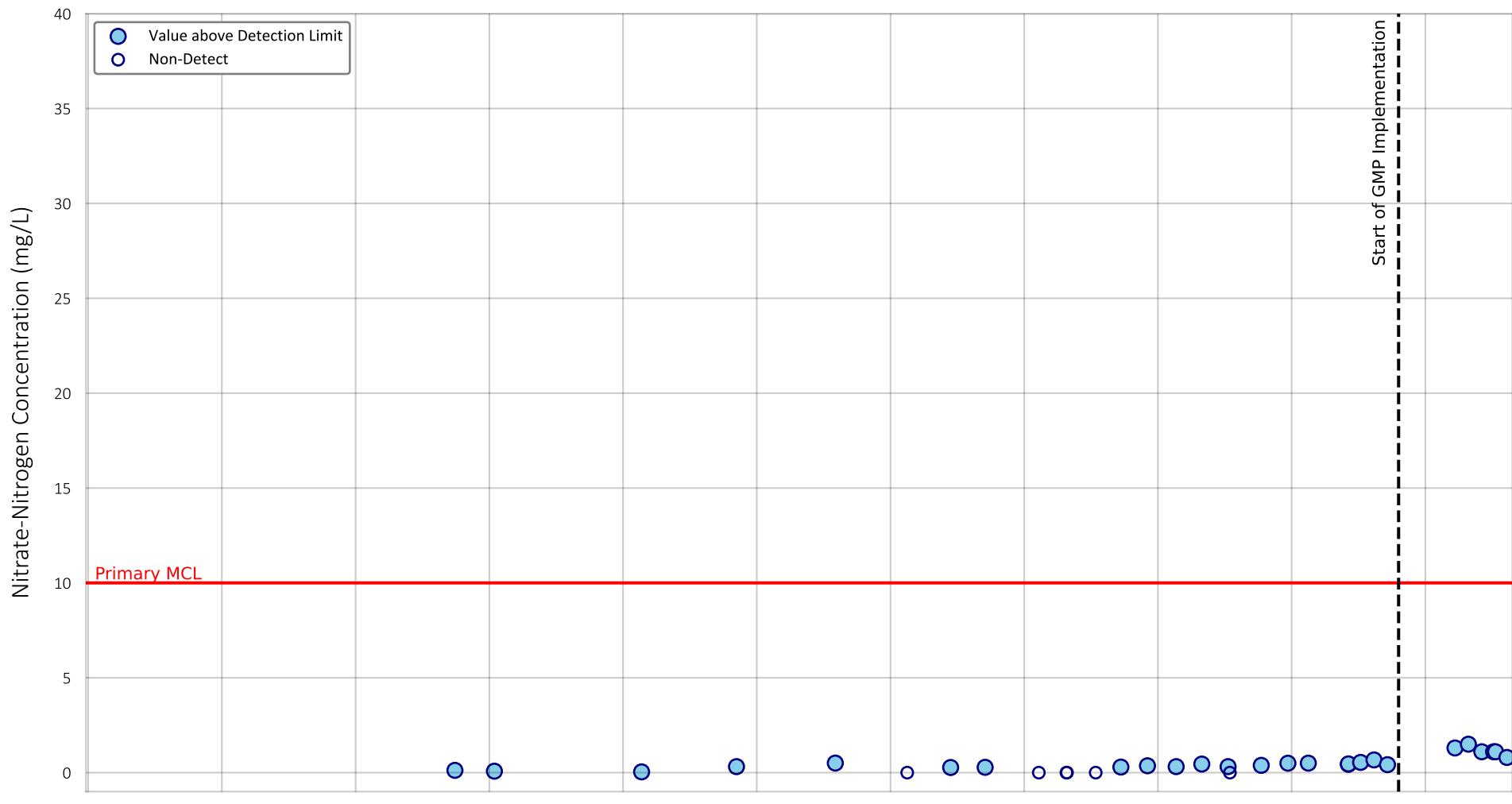


Prepared by:



Nitrate-Nitrogen Concentration  
 Well Name: ID4-1  
 State Well ID: 010S006E32R001S  
 Well Depth (ft): no data  
 Perforated Interval (ft): no data - no data

Figure G-34



Location of Well in Borrego Springs

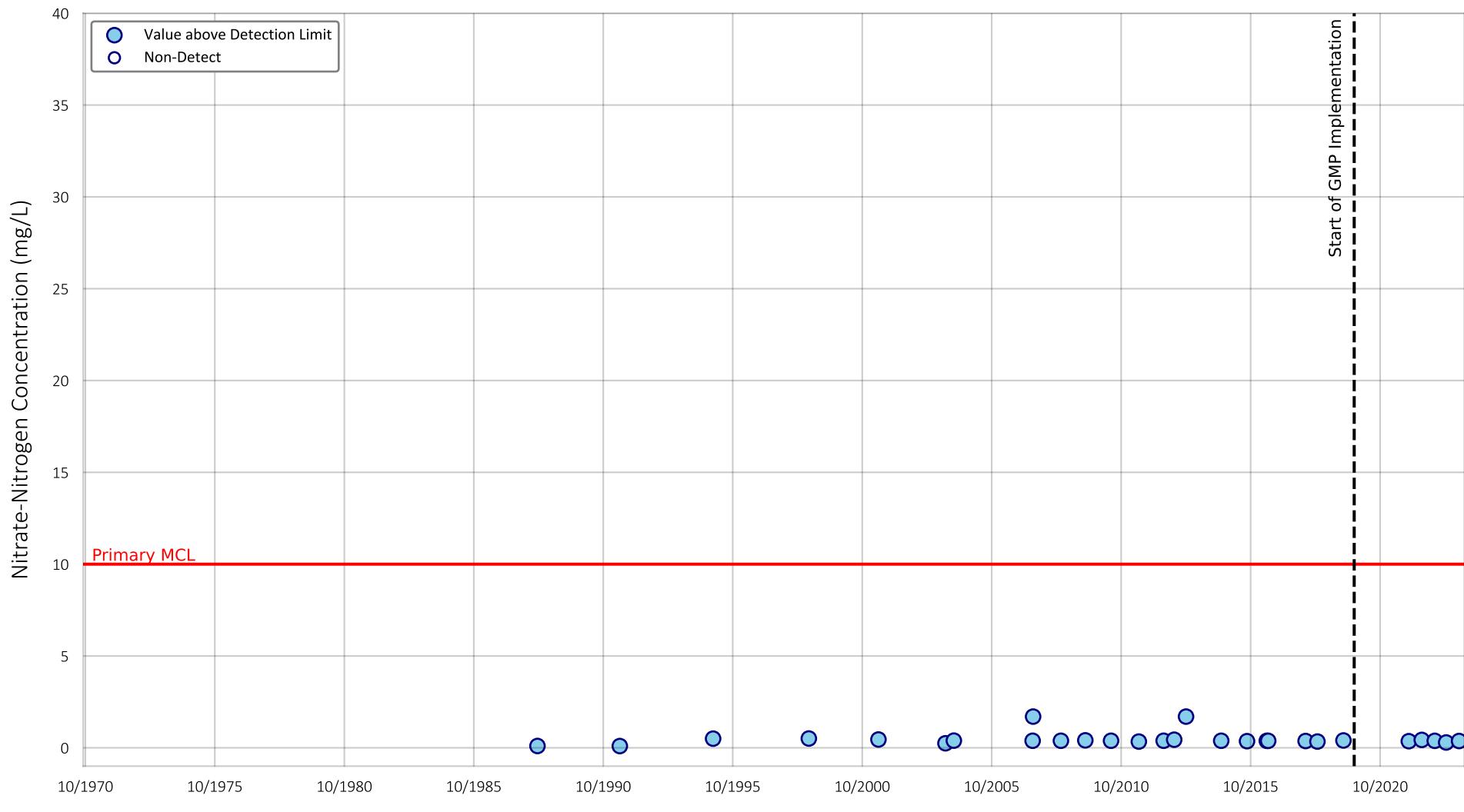


Prepared by:



Nitrate-Nitrogen Concentration  
 Well Name: ID4-18  
 State Well ID: 010S006E18J001S  
 Well Depth (ft): 570  
 Perforated Interval (ft): 240 - 560

Figure G-35



Location of Well in Borrego Springs

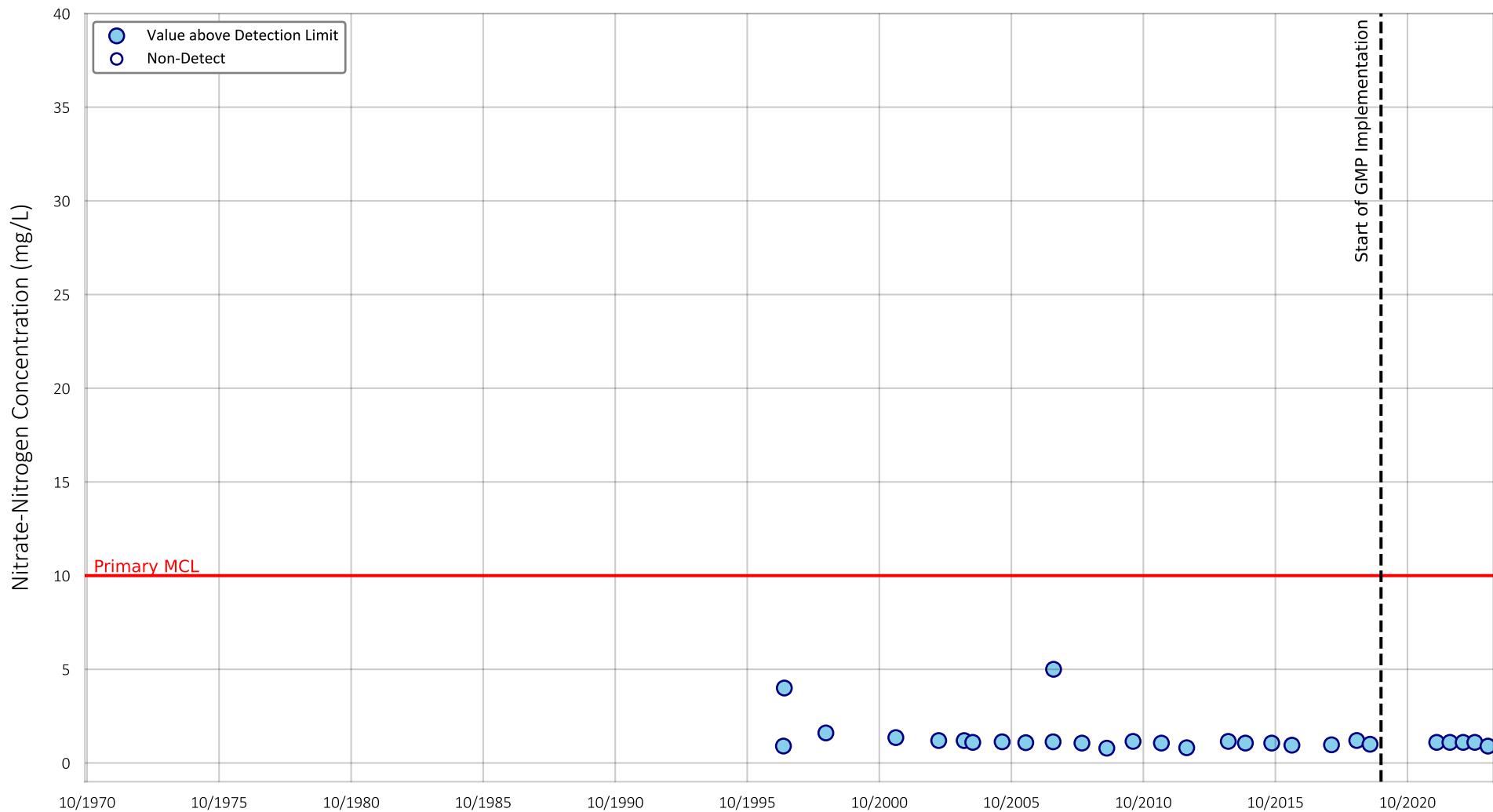


Prepared by:



Nitrate-Nitrogen Concentration  
 Well Name: ID1-12  
 State Well ID: 011S006E16A002S  
 Well Depth (ft): 580  
 Perforated Interval (ft): 248 - 568

Figure G-36



Location of Well in Borrego Springs

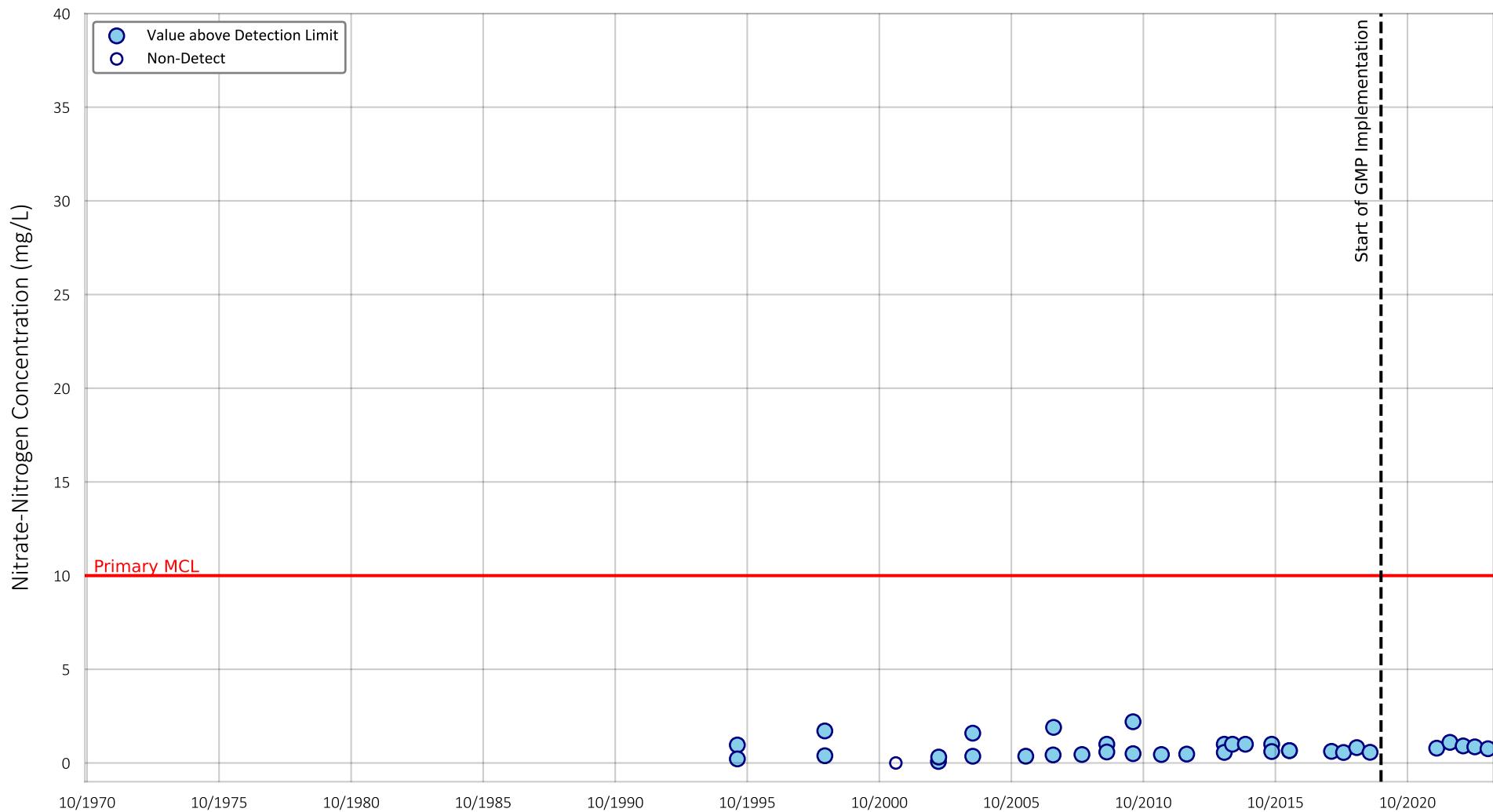


Prepared by:



Nitrate-Nitrogen Concentration  
 Well Name: ID1-16  
 State Well ID: 011S006E16N001S  
 Well Depth (ft): 705  
 Perforated Interval (ft): 160 - 549

Figure G-37



Location of Well in Borrego Springs

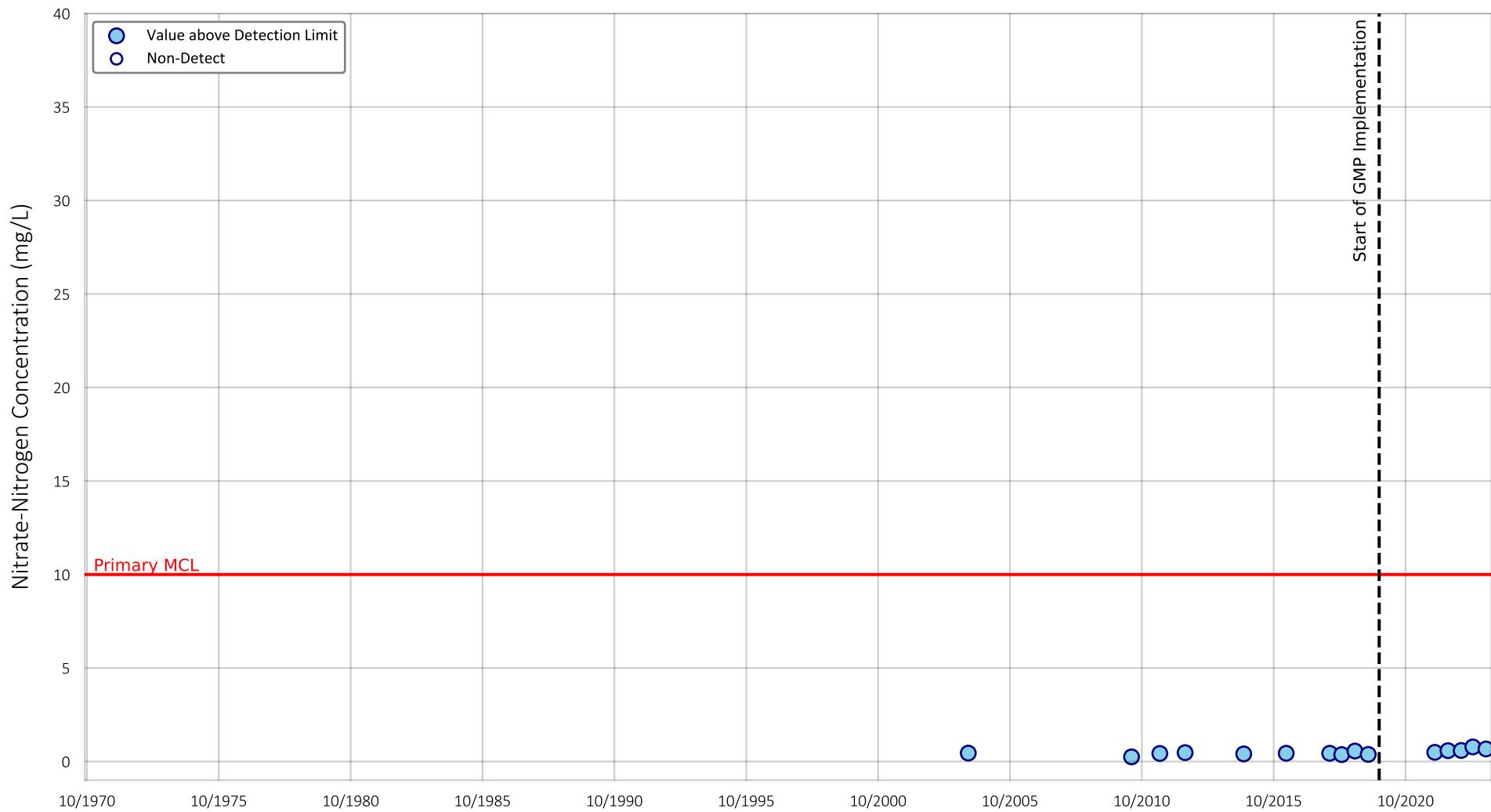


Prepared by:



Nitrate-Nitrogen Concentration  
 Well Name: ID4-11  
 State Well ID: 010S006E32D001S  
 Well Depth (ft): 770  
 Perforated Interval (ft): 450 - 760

Figure G-38



Location of Well in Borrego Springs

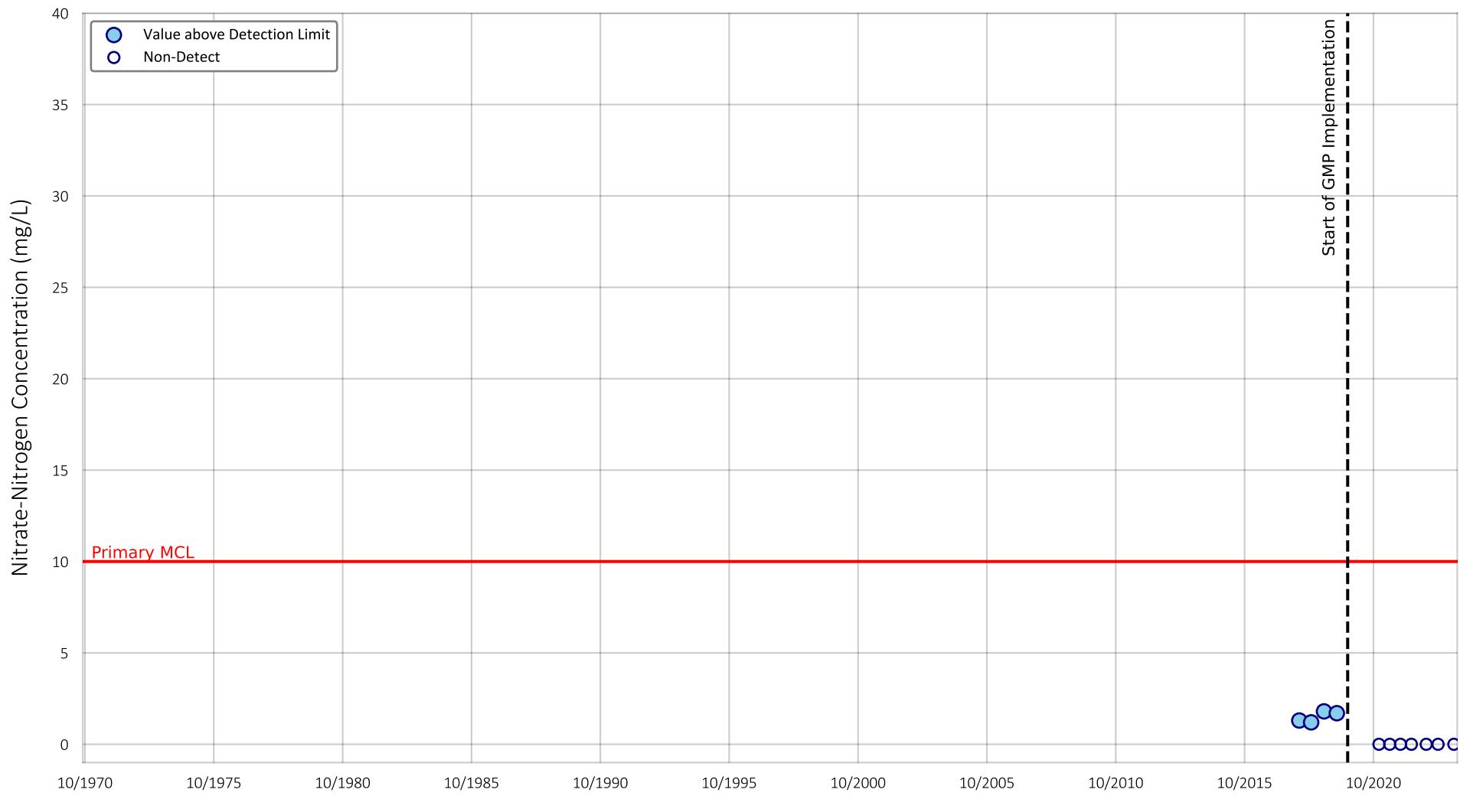


Prepared by:



Nitrate-Nitrogen Concentration  
Well Name: ID5-5  
State Well ID: 011S006E09E001S  
Well Depth (ft): 700  
Perforated Interval (ft): 400 - 700

Figure G-39



Location of Well in Borrego Springs

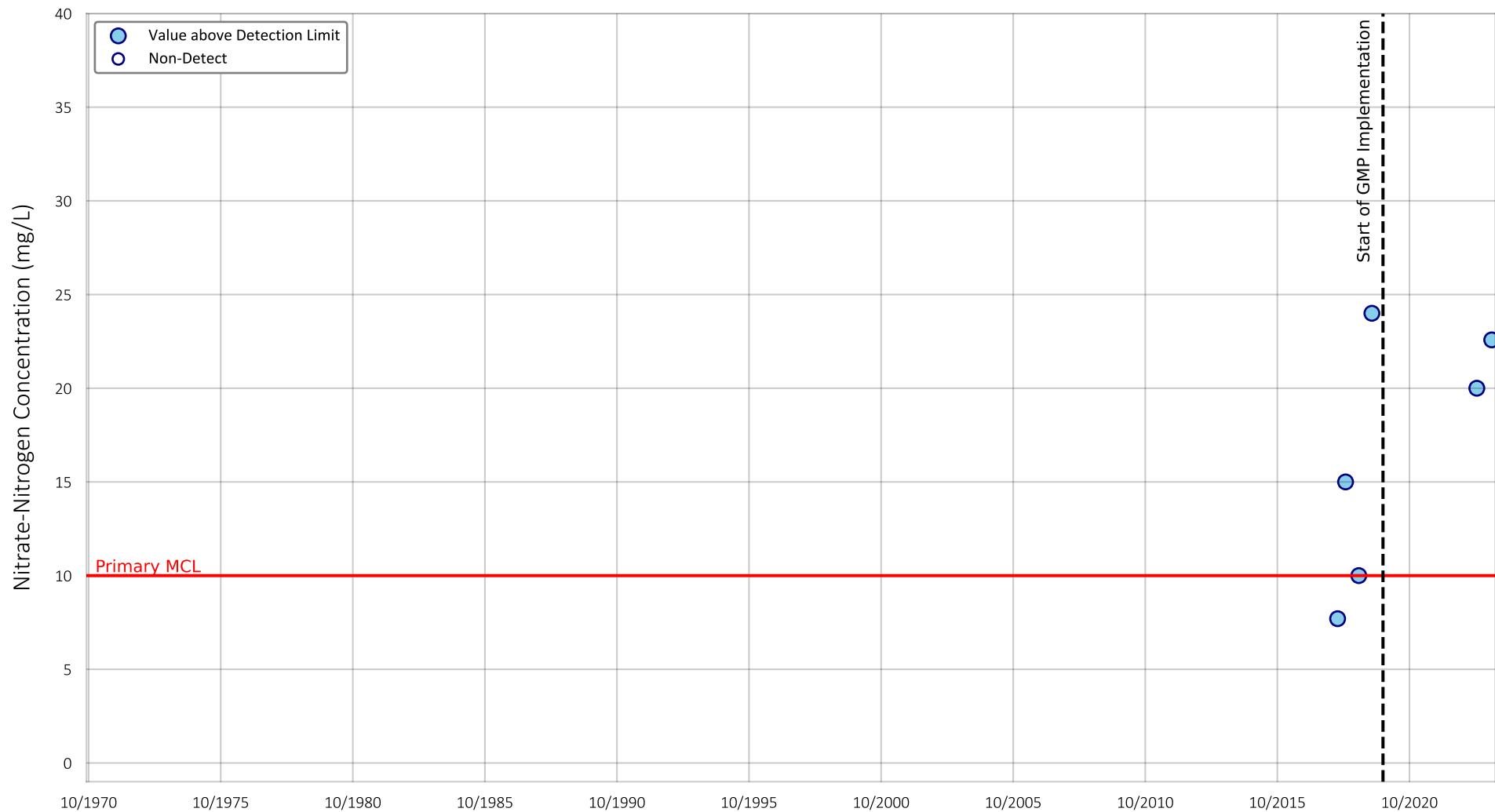


Prepared by:



Nitrate-Nitrogen Concentration  
 Well Name: MW-3  
 State Well ID: 011S006E23J002S  
 Well Depth (ft): 325  
 Perforated Interval (ft): 175 - 331

Figure G-40



Location of Well in Borrego Springs

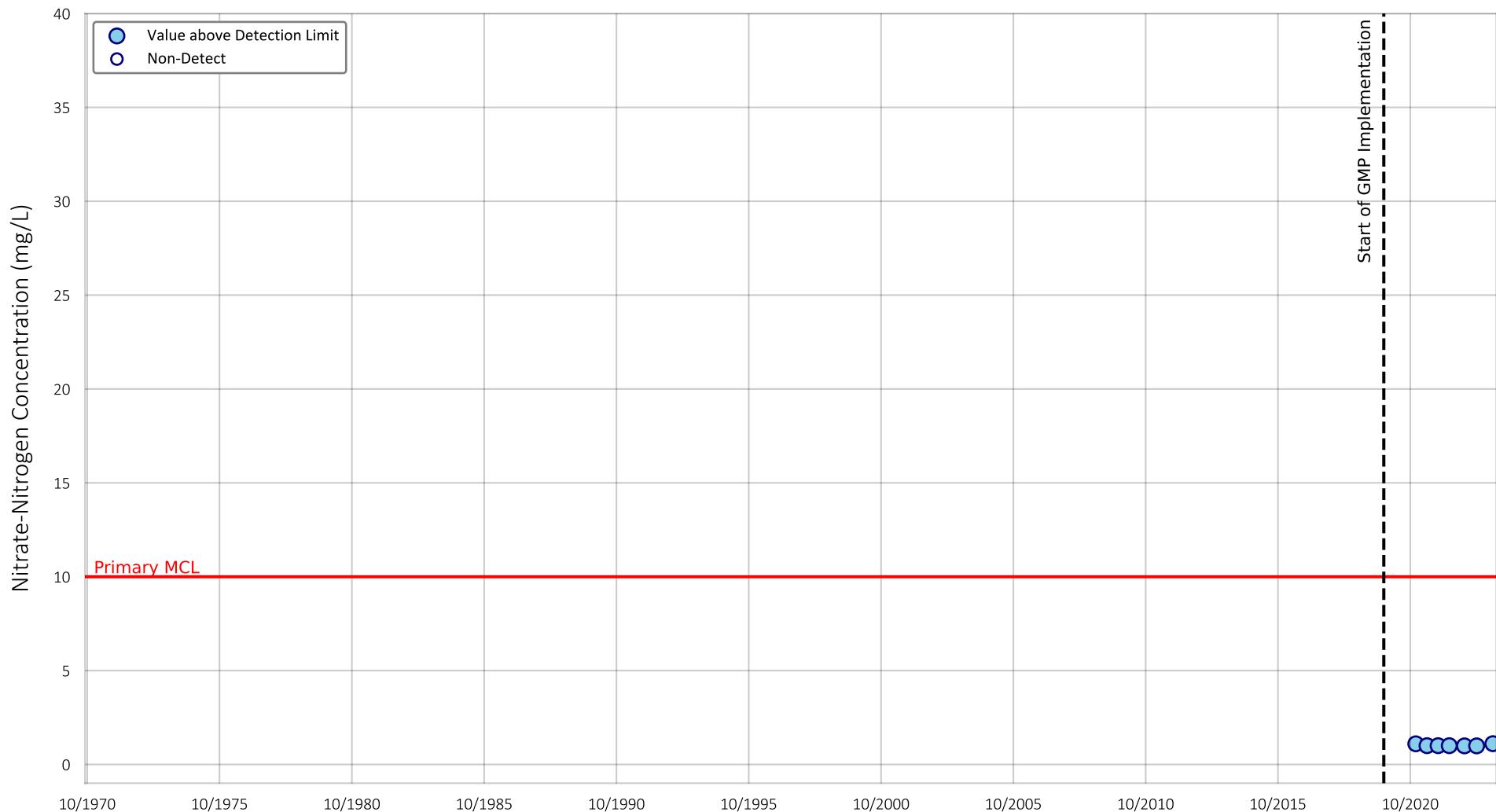


Prepared by:



Nitrate-Nitrogen Concentration  
Well Name: Fortiner  
State Well ID: 010S006E09N001S  
Well Depth (ft): 560  
Perforated Interval (ft): 250 - 607

Figure G-41



Location of Well in Borrego Springs

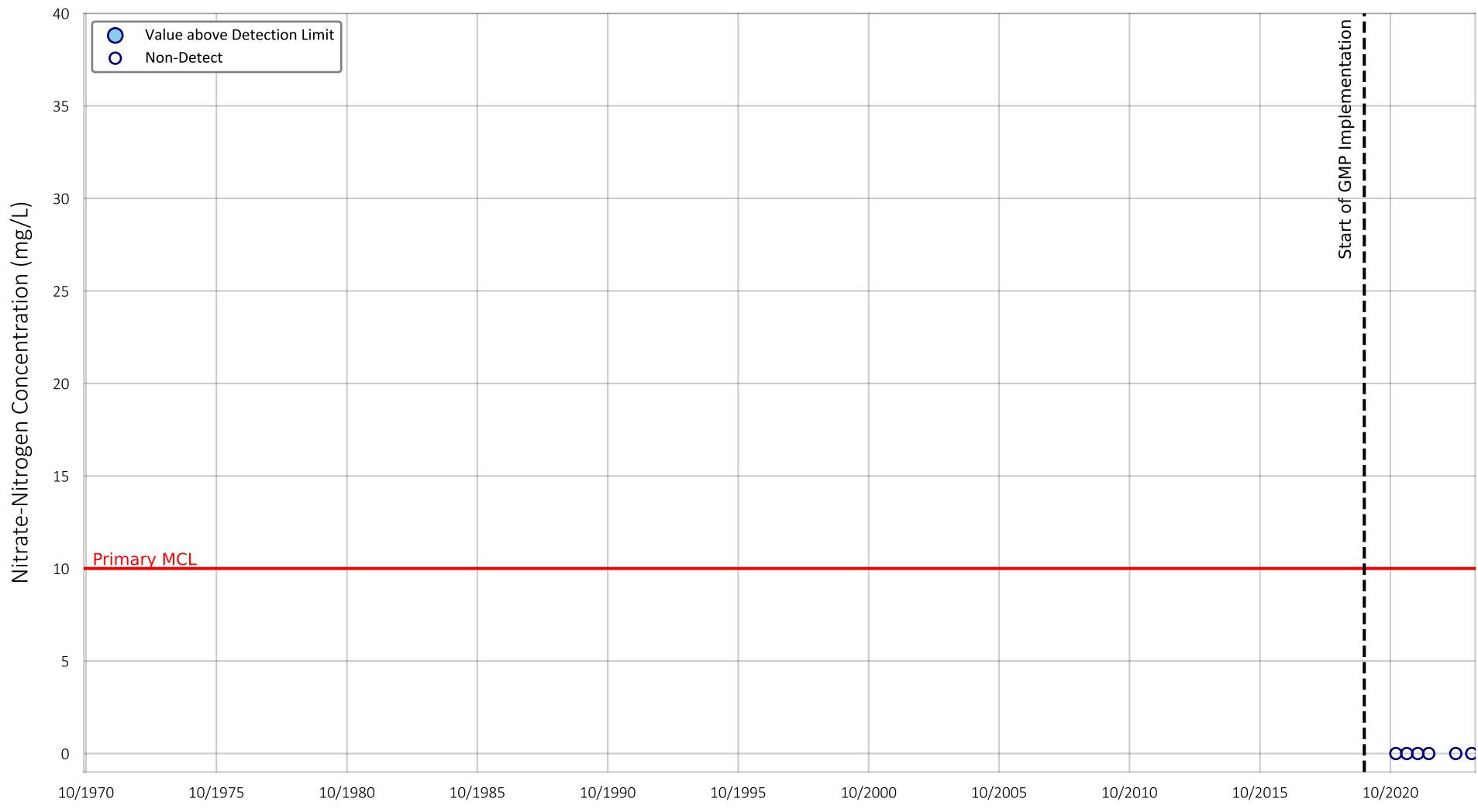


Prepared by:



Nitrate-Nitrogen Concentration  
 Well Name: Air Ranch Well 4  
 State Well ID: 011S007E30L001S  
 Well Depth (ft): 380  
 Perforated Interval (ft): 120 - 380

Figure G-42



Location of Well in Borrego Springs

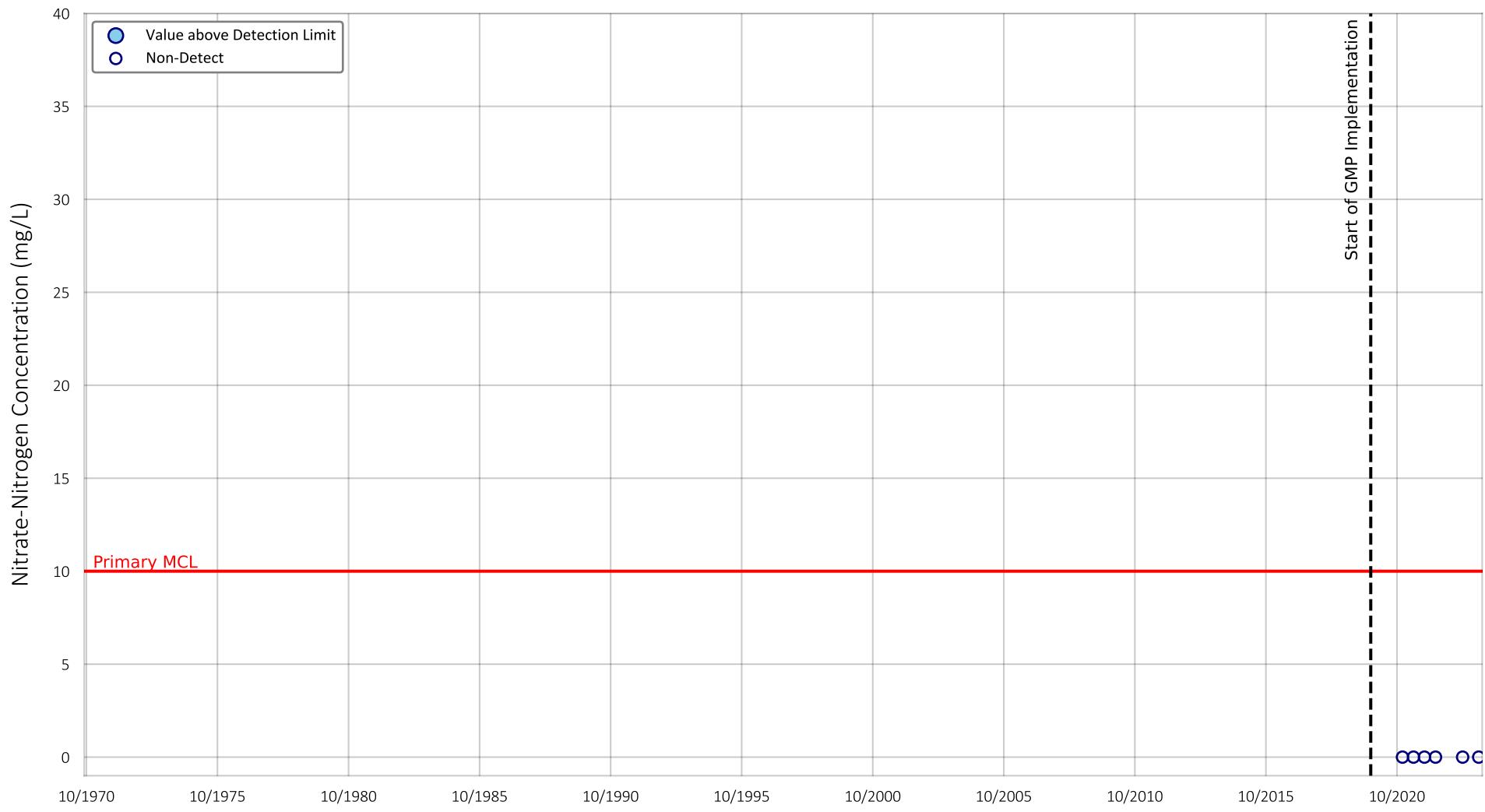


Prepared by:

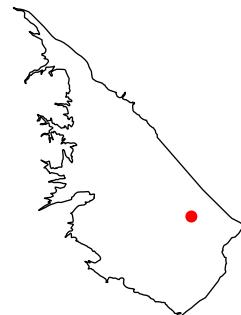


Nitrate-Nitrogen Concentration  
 Well Name: MW-5A (East-Lower)  
 State Well ID: 011S007E07R001S  
 Well Depth (ft): 345  
 Perforated Interval (ft): 50 - 160

Figure G-43



Location of Well in Borrego Springs

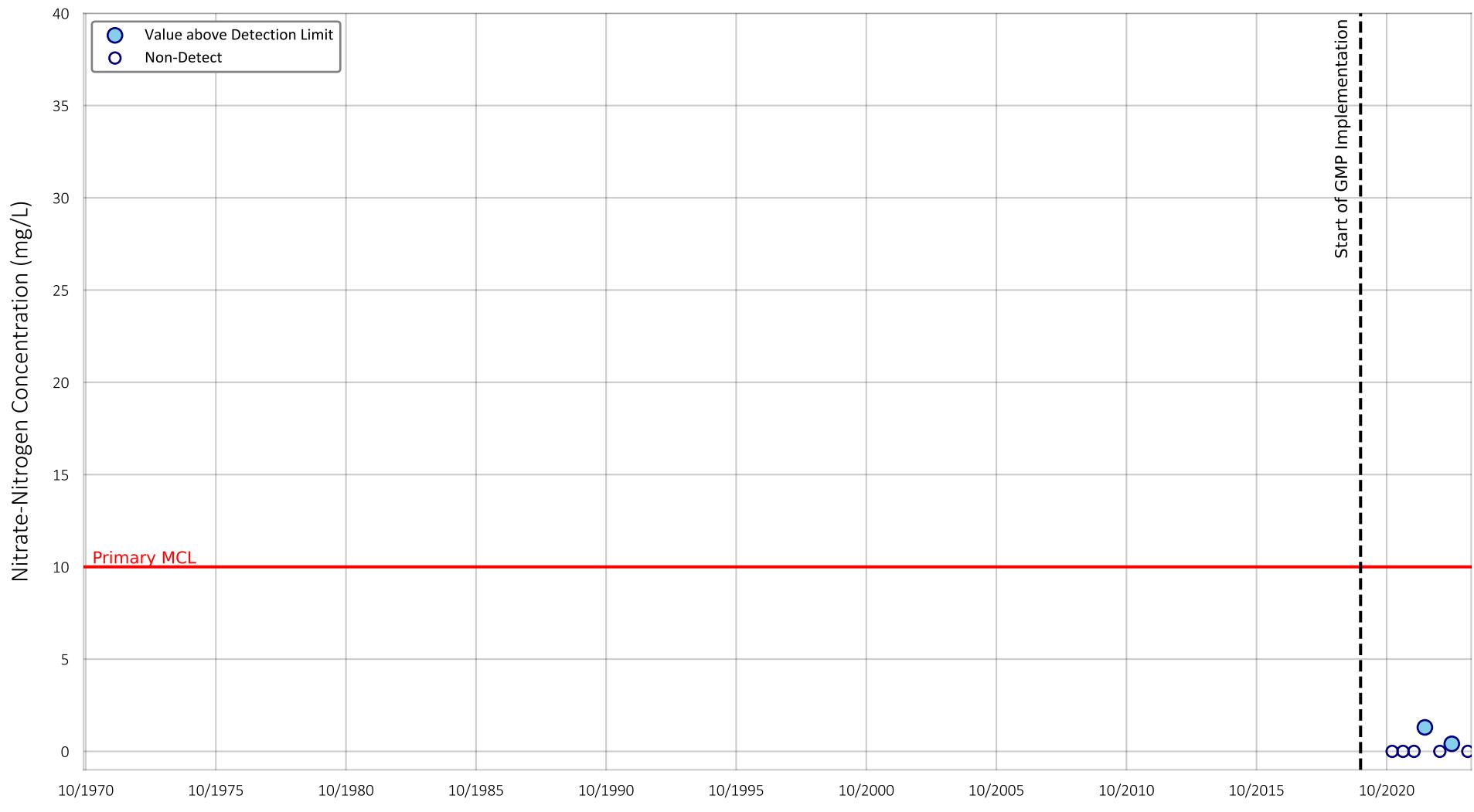


Prepared by:



Nitrate-Nitrogen Concentration  
 Well Name: MW-5B (West-Upper)  
 State Well ID: 011S007E07R002S  
 Well Depth (ft): 160  
 Perforated Interval (ft): 45 - 340

Figure G-44



Location of Well in Borrego Springs

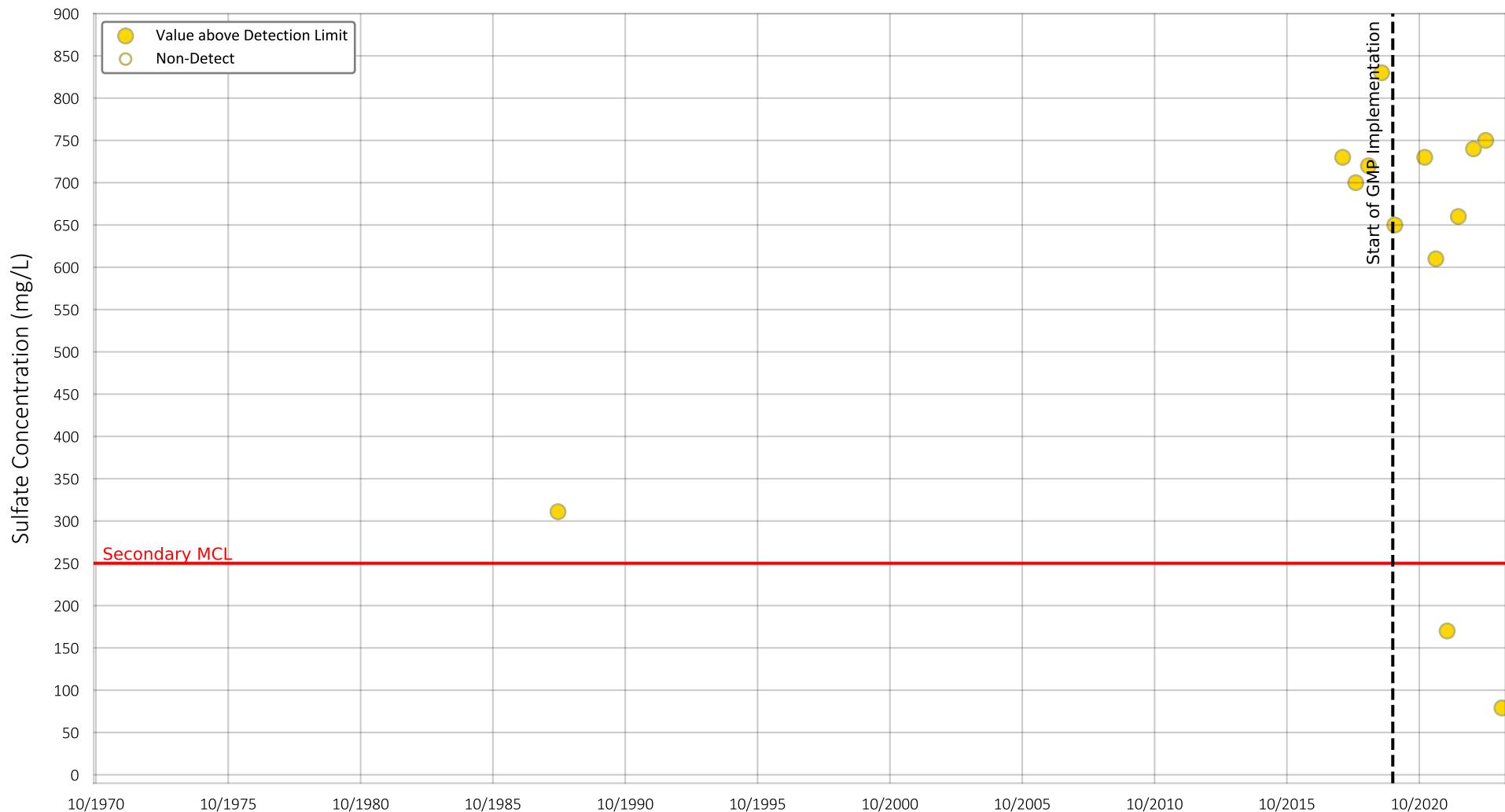


Prepared by:



Nitrate-Nitrogen Concentration  
 Well Name: MW-1  
 State Well ID: 010S006E21A002S  
 Well Depth (ft): 900  
 Perforated Interval (ft): 800 - 890

Figure G-45



Location of Well in Borrego Springs

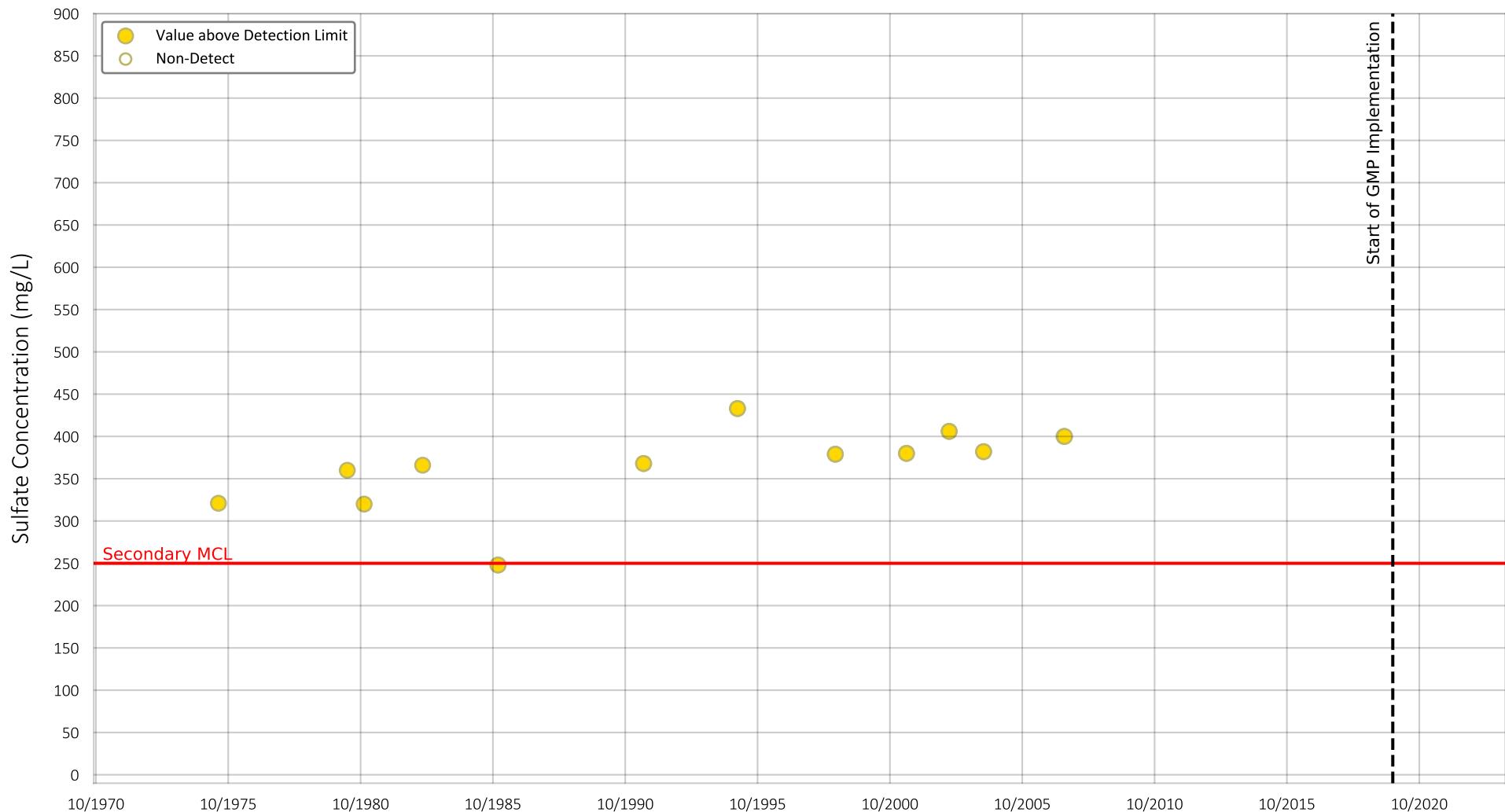


Prepared by:



Sulfate Concentration  
 Well Name: RH-1 (ID1-1)  
 State Well ID: 011S006E25A001S  
 Well Depth (ft): 600  
 Perforated Interval (ft): 180 - 580

Figure G-46



Location of Well in Borrego Springs

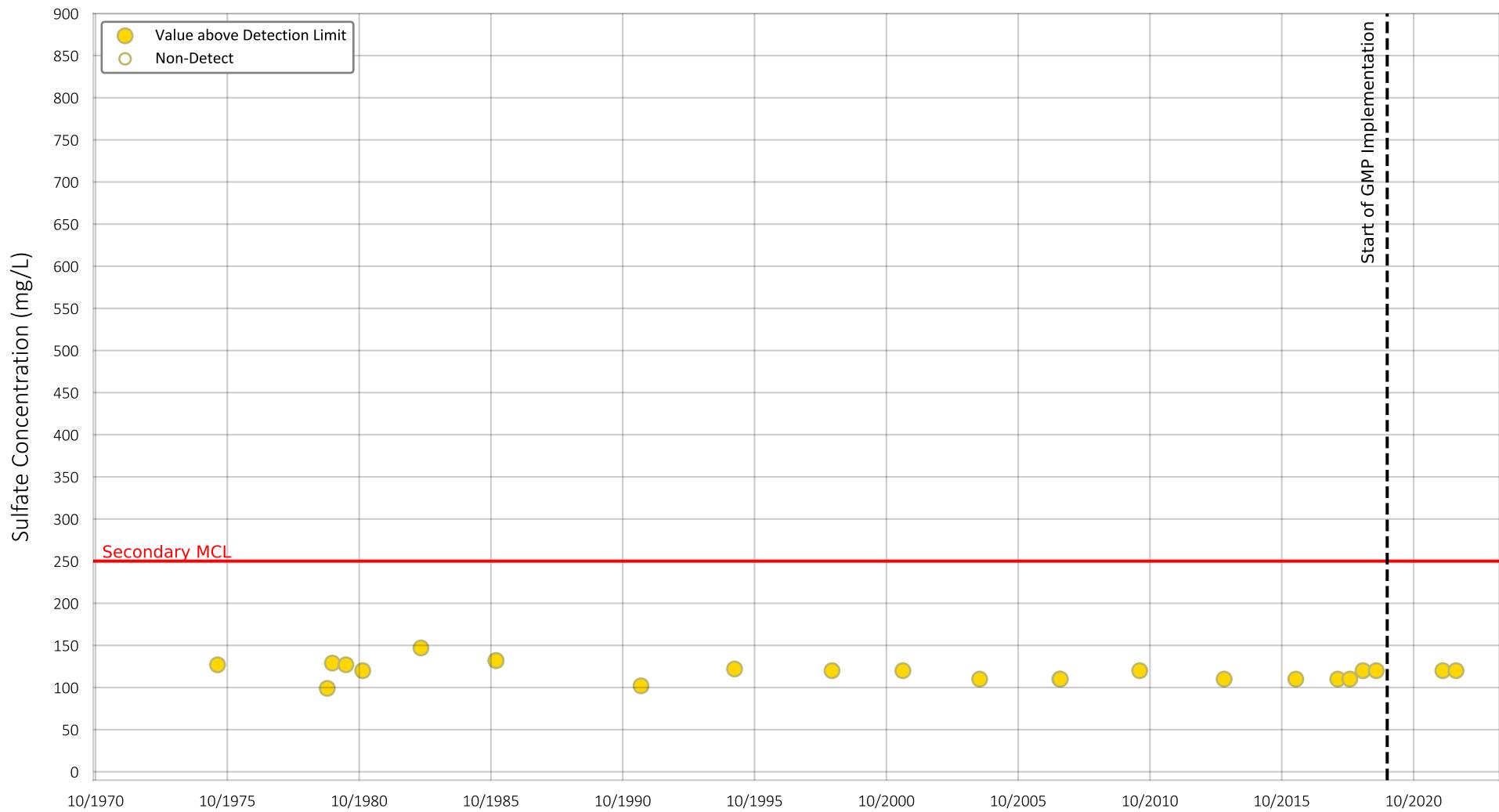


Prepared by:



Sulfate Concentration  
Well Name: ID4-3  
State Well ID: 010S006E18R001S  
Well Depth (ft): 621  
Perforated Interval (ft): no data - no data

Figure G-47



Location of Well in Borrego Springs

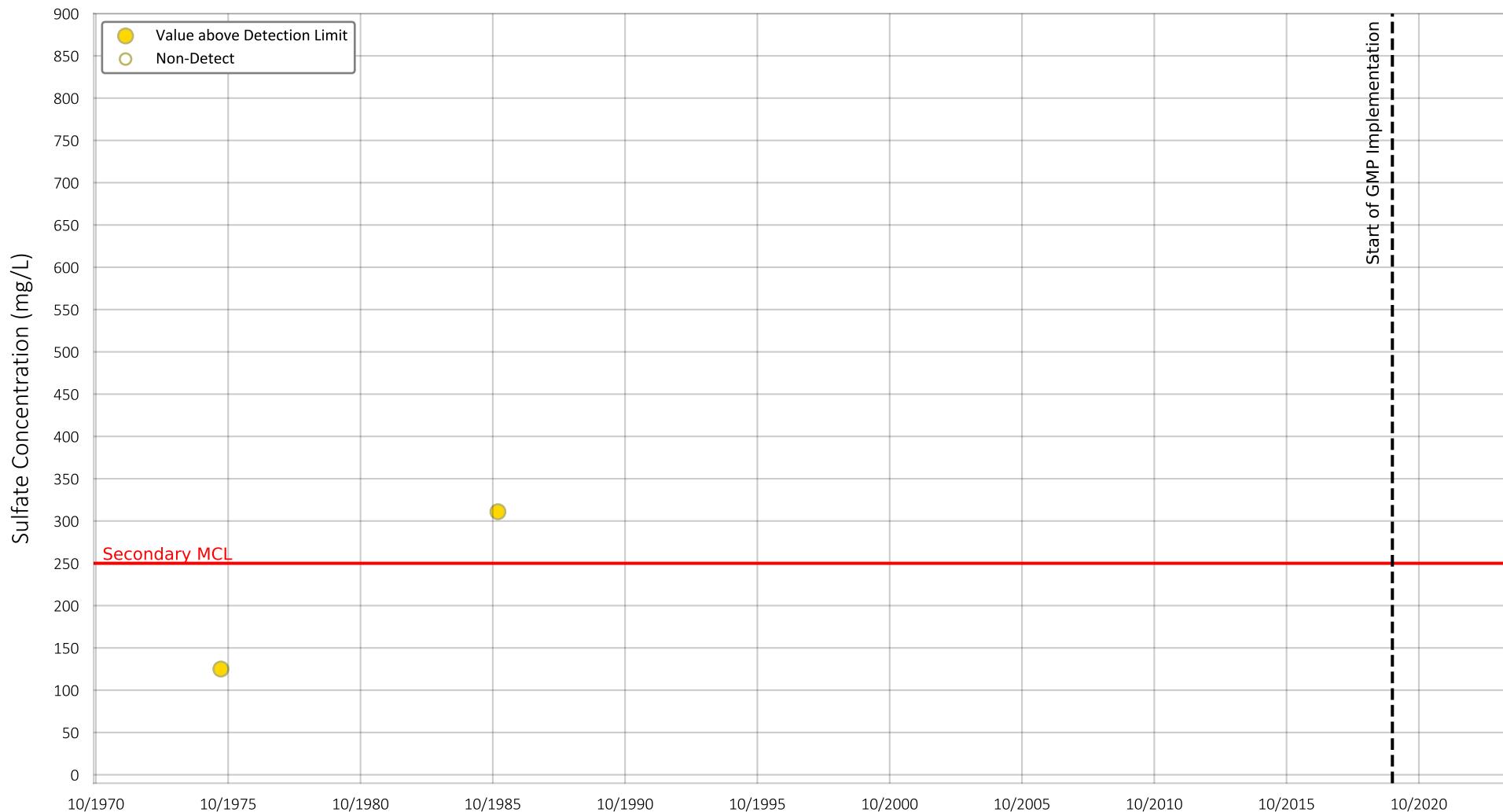


Prepared by:



Sulfate Concentration  
 Well Name: ID4-4  
 State Well ID: 010S006E29K002S  
 Well Depth (ft): 802  
 Perforated Interval (ft): 470 - 786

Figure G-48



Location of Well in Borrego Springs

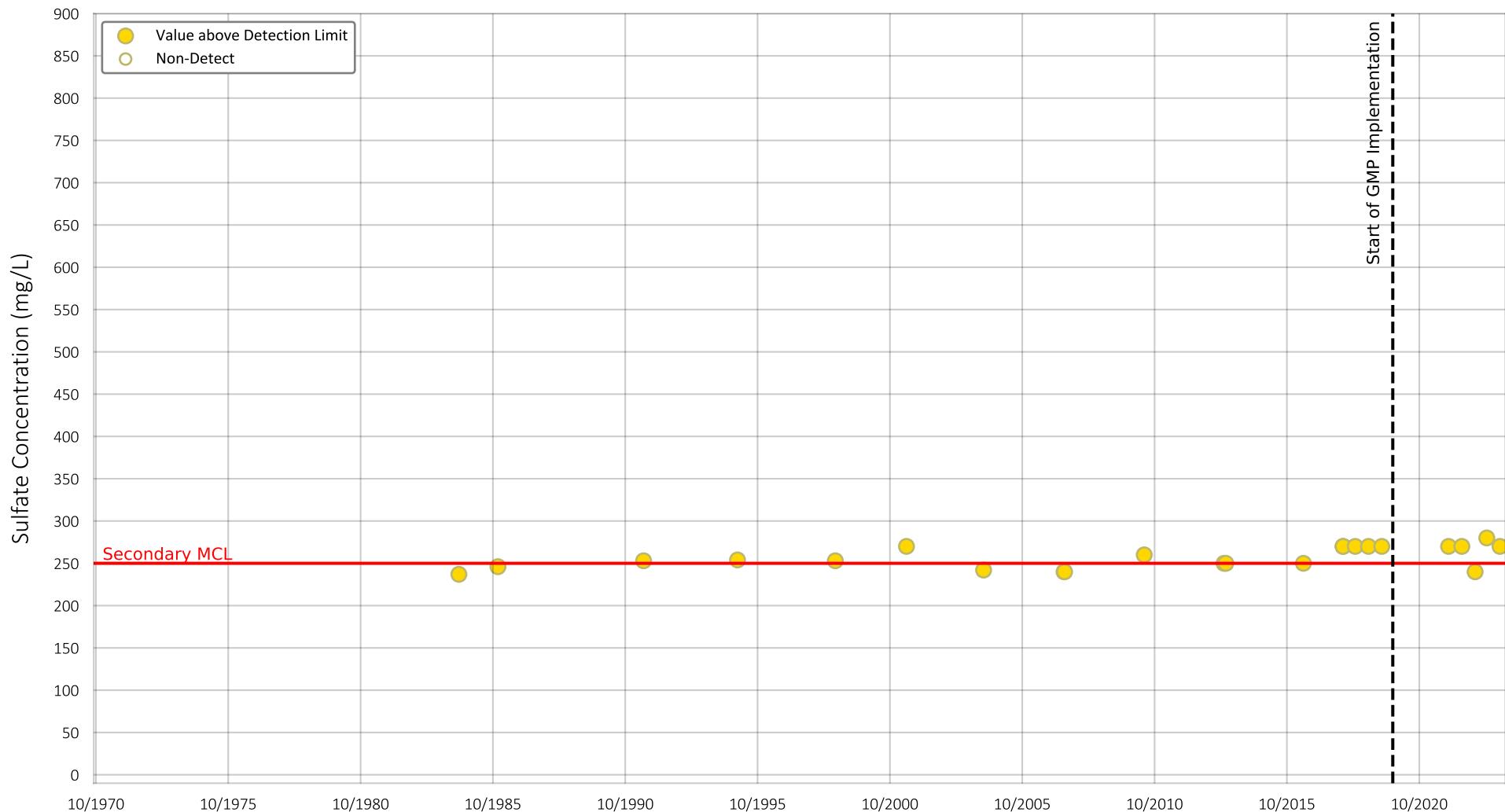


Prepared by:



Sulfate Concentration  
 Well Name: ID4-1  
 State Well ID: 010S006E32R001S  
 Well Depth (ft): no data  
 Perforated Interval (ft): no data - no data

Figure G-49



Location of Well in Borrego Springs

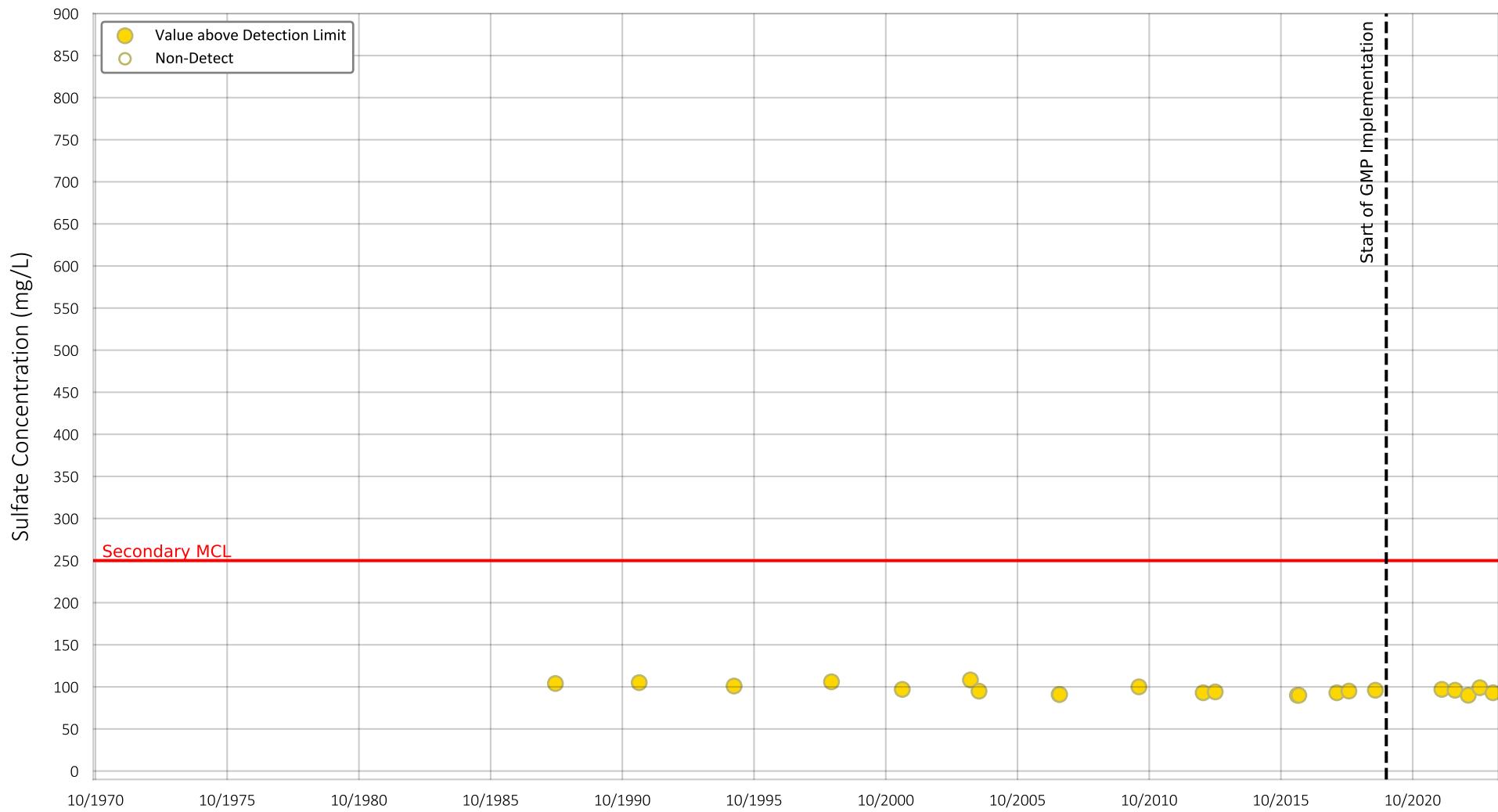


Prepared by:



Sulfate Concentration  
 Well Name: ID4-18  
 State Well ID: 010S006E18J001S  
 Well Depth (ft): 570  
 Perforated Interval (ft): 240 - 560

Figure G-50



Location of Well in Borrego Springs

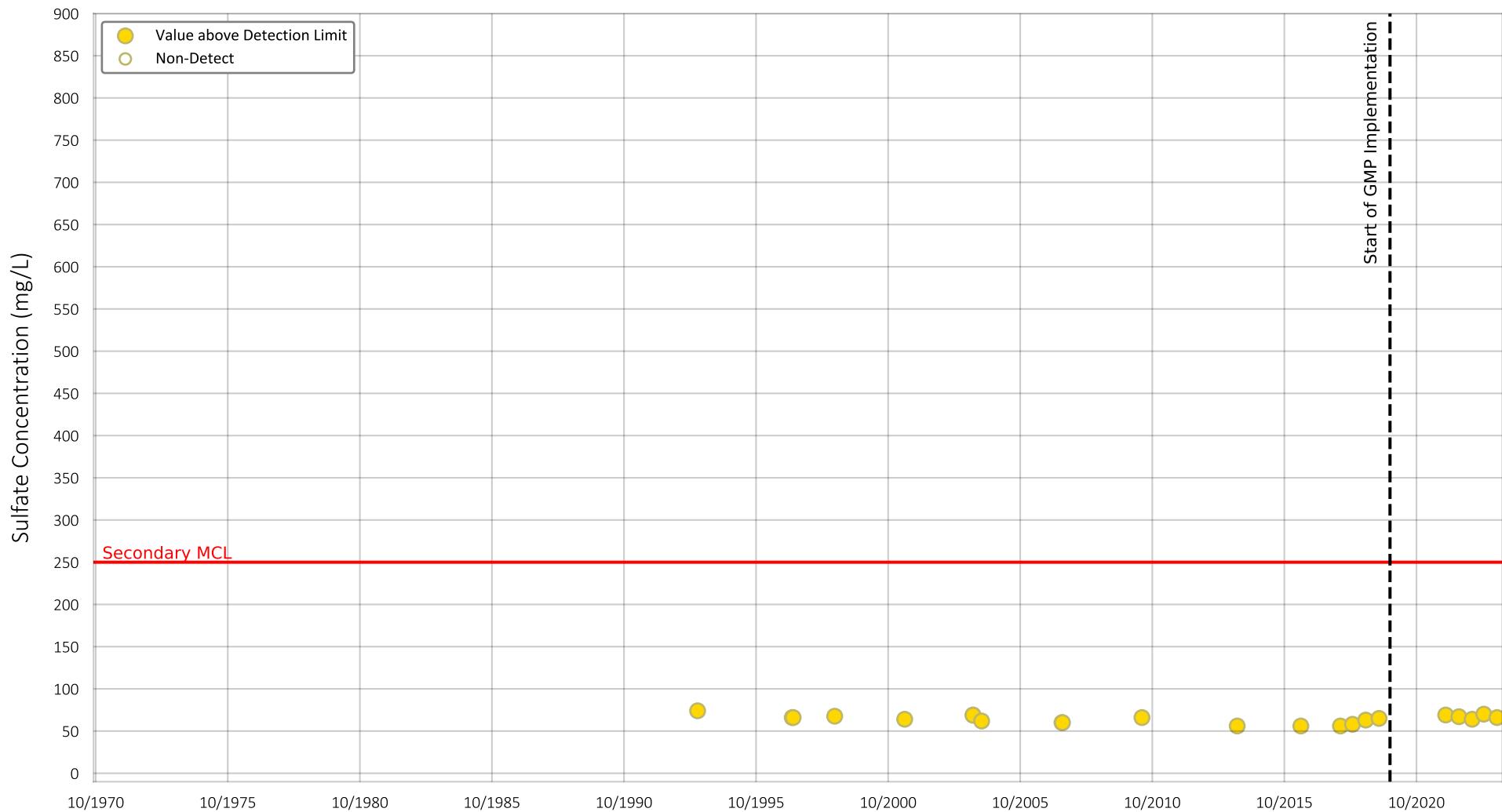


Prepared by:



Sulfate Concentration  
 Well Name: ID1-12  
 State Well ID: 011S006E16A002S  
 Well Depth (ft): 580  
 Perforated Interval (ft): 248 - 568

Figure G-51



Location of Well in Borrego Springs

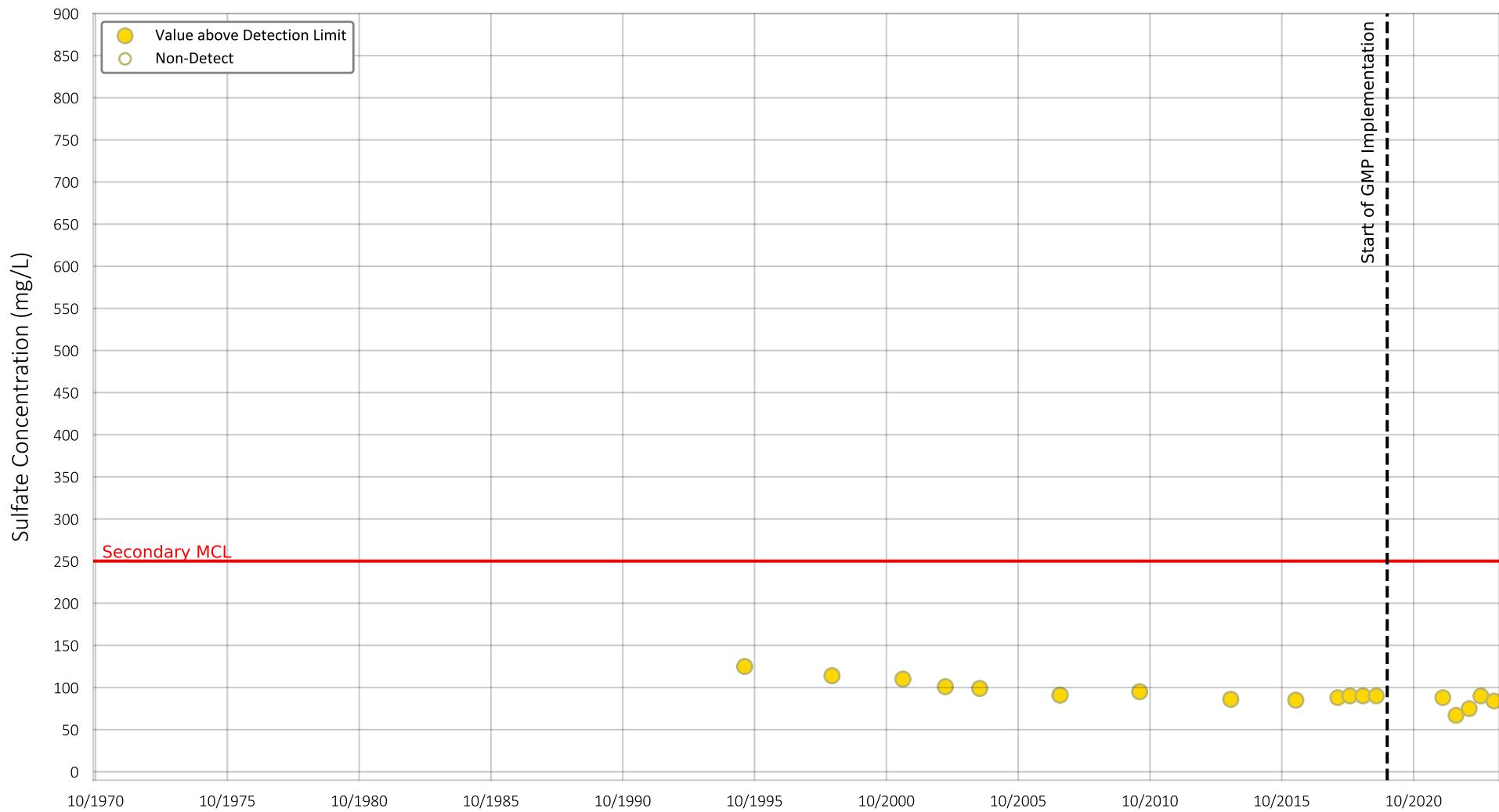


Prepared by:



Sulfate Concentration  
Well Name: ID1-16  
State Well ID: 011S006E16N001S  
Well Depth (ft): 705  
Perforated Interval (ft): 160 - 549

Figure G-52



Location of Well in Borrego Springs

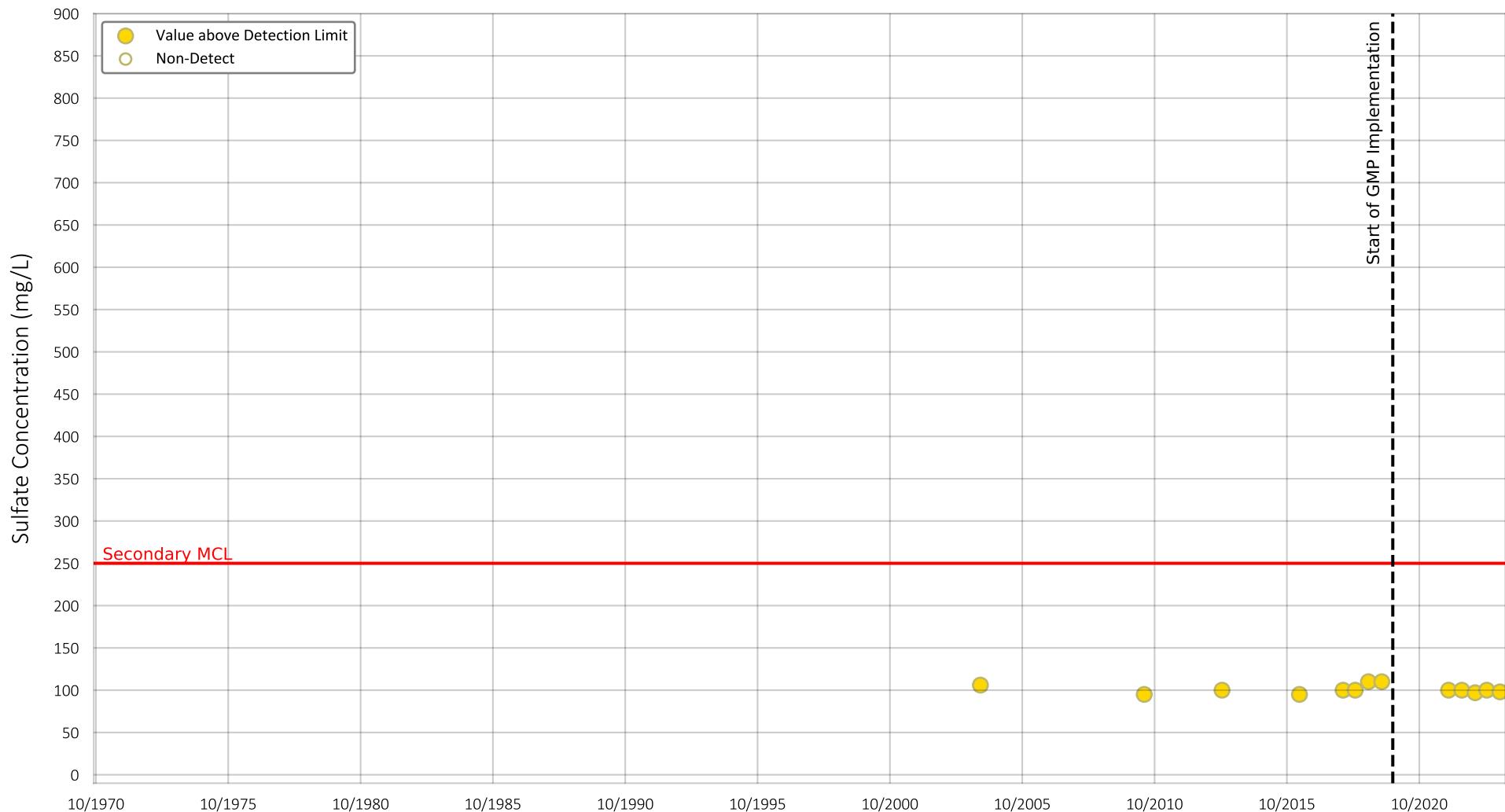


Prepared by:



Sulfate Concentration  
 Well Name: ID4-11  
 State Well ID: 010S006E32D001S  
 Well Depth (ft): 770  
 Perforated Interval (ft): 450 - 760

Figure G-53



Location of Well in Borrego Springs



Prepared by:



Sulfate Concentration  
 Well Name: ID5-5  
 State Well ID: 011S006E09E001S  
 Well Depth (ft): 700  
 Perforated Interval (ft): 400 - 700

Figure G-54



Location of Well in Borrego Springs

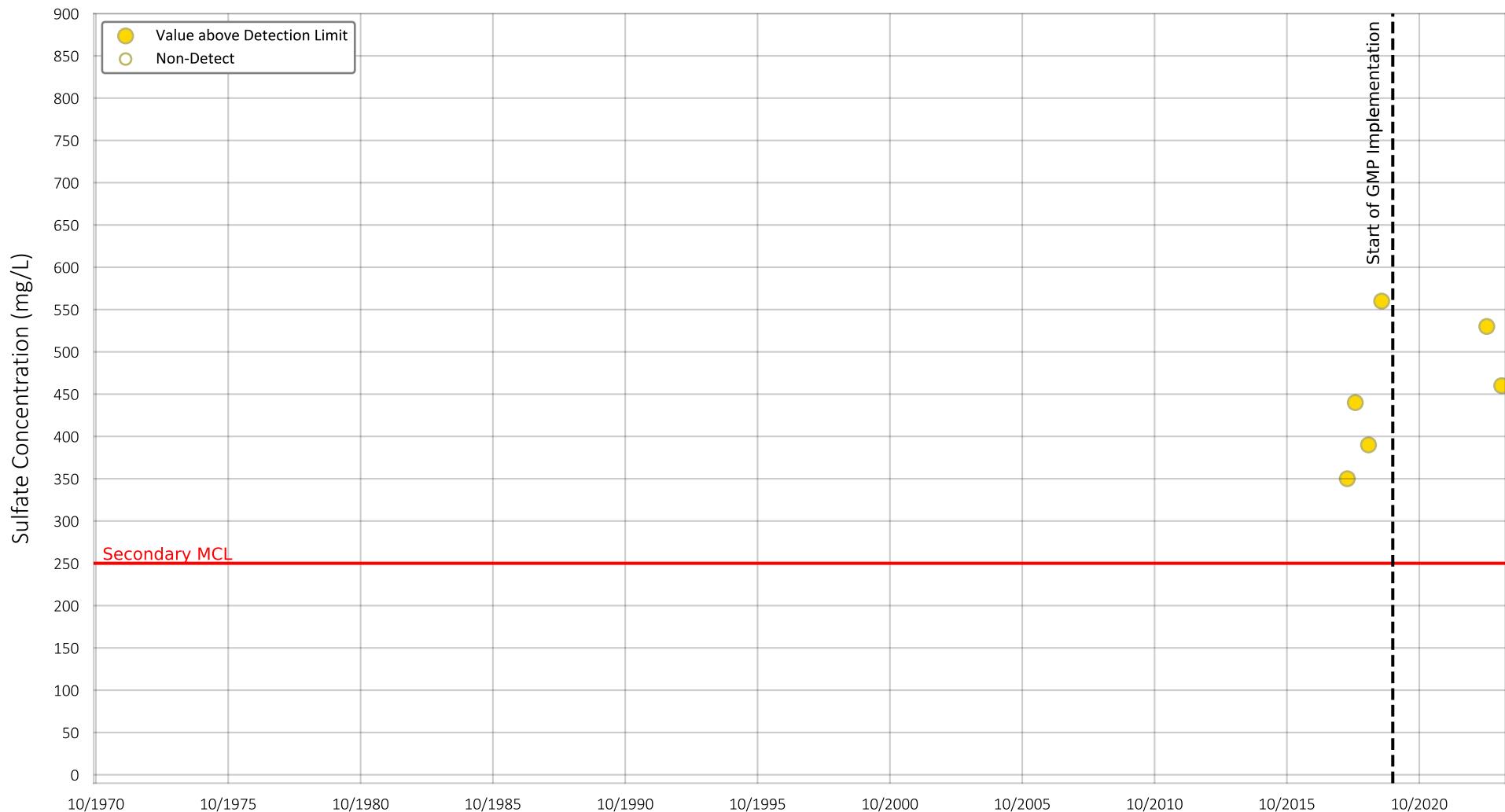


Prepared by:



Sulfate Concentration  
 Well Name: MW-3  
 State Well ID: 011S006E23J002S  
 Well Depth (ft): 325  
 Perforated Interval (ft): 175 - 331

Figure G-55



Location of Well in Borrego Springs

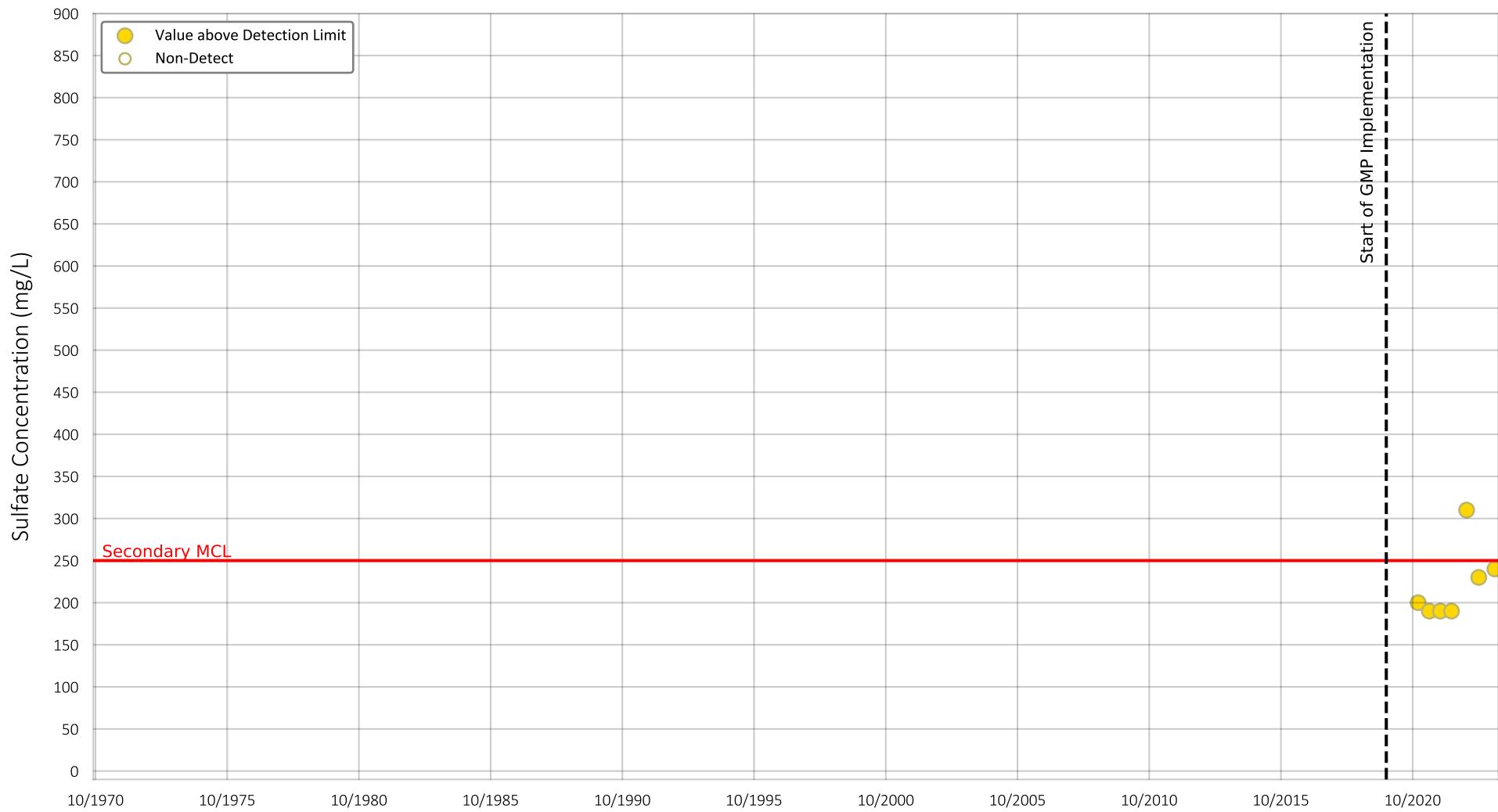


Prepared by:



Sulfate Concentration  
 Well Name: Fortiner  
 State Well ID: 01S006E09N001S  
 Well Depth (ft): 560  
 Perforated Interval (ft): 250 - 607

Figure G-56



Location of Well in Borrego Springs

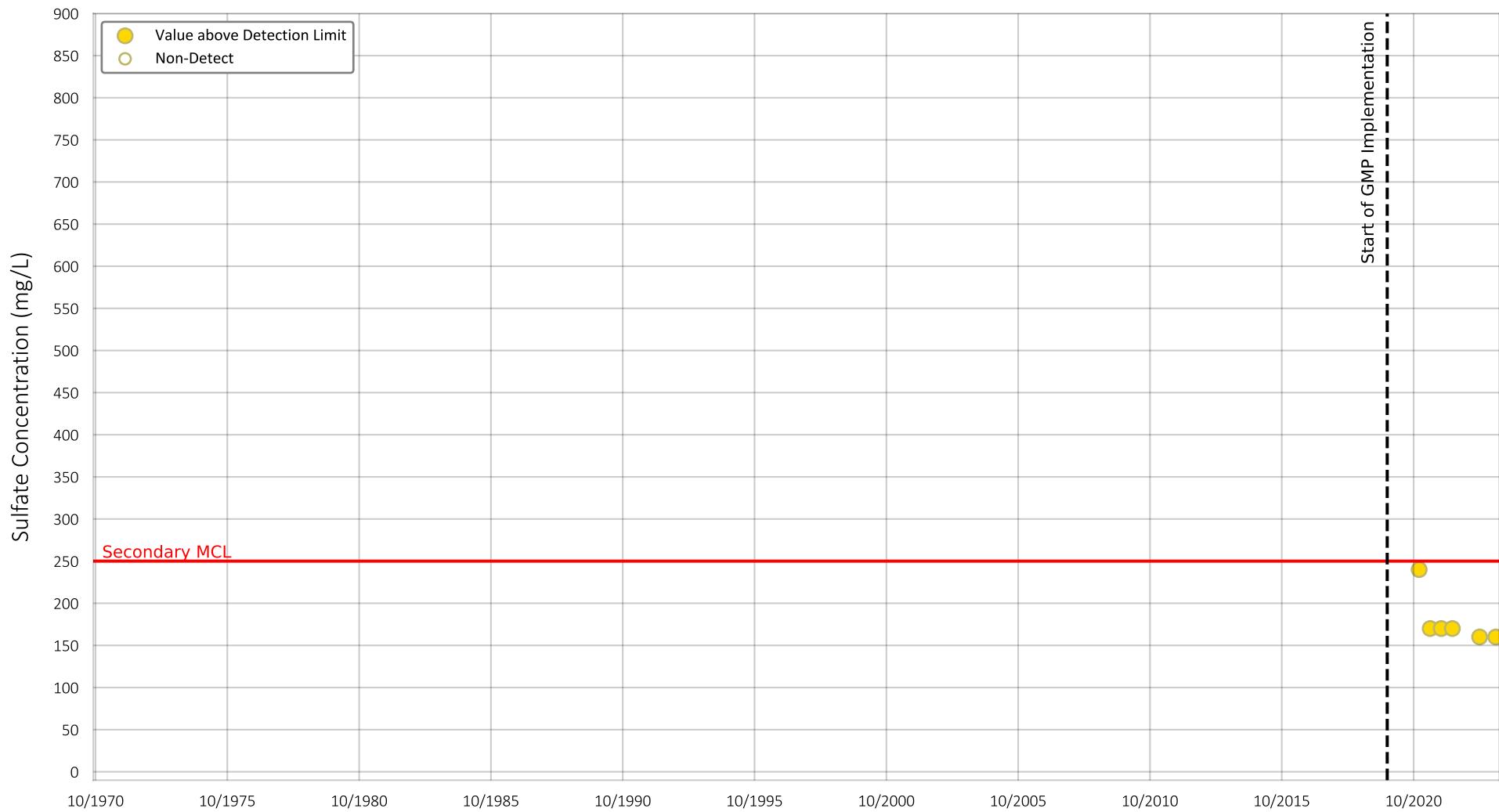


Prepared by:



Sulfate Concentration  
 Well Name: Air Ranch Well 4  
 State Well ID: 011S007E30L001S  
 Well Depth (ft): 380  
 Perforated Interval (ft): 120 - 380

Figure G-57



### Location of Well in Borrego Springs

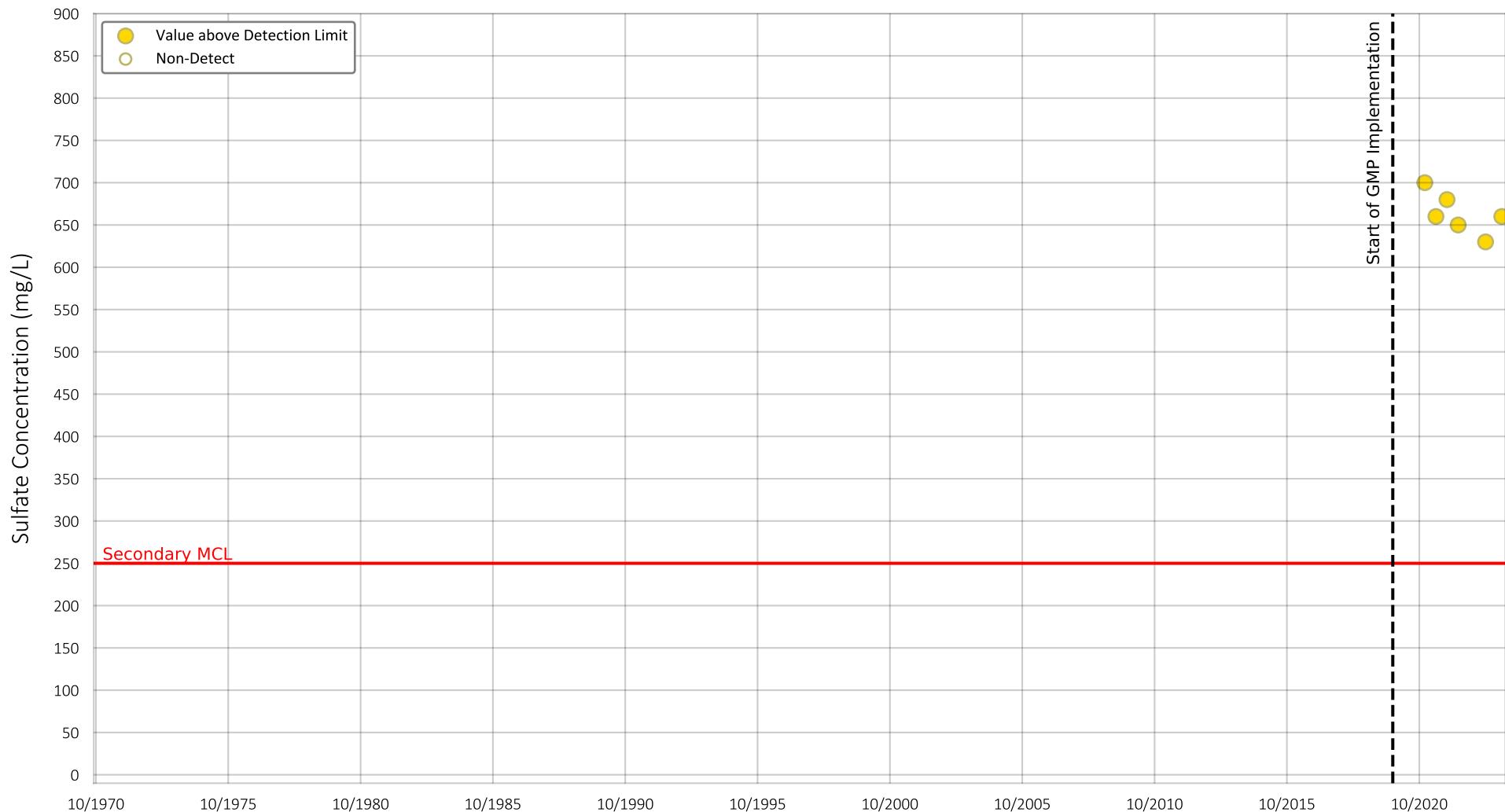


Prepared by:



Sulfate Concentration  
Well Name: MW-5A (East-Lower)  
State Well ID: 011S007E07R001S  
Well Depth (ft): 345  
Perforated Interval (ft): 50 - 160

Figure G-58



Location of Well in Borrego Springs

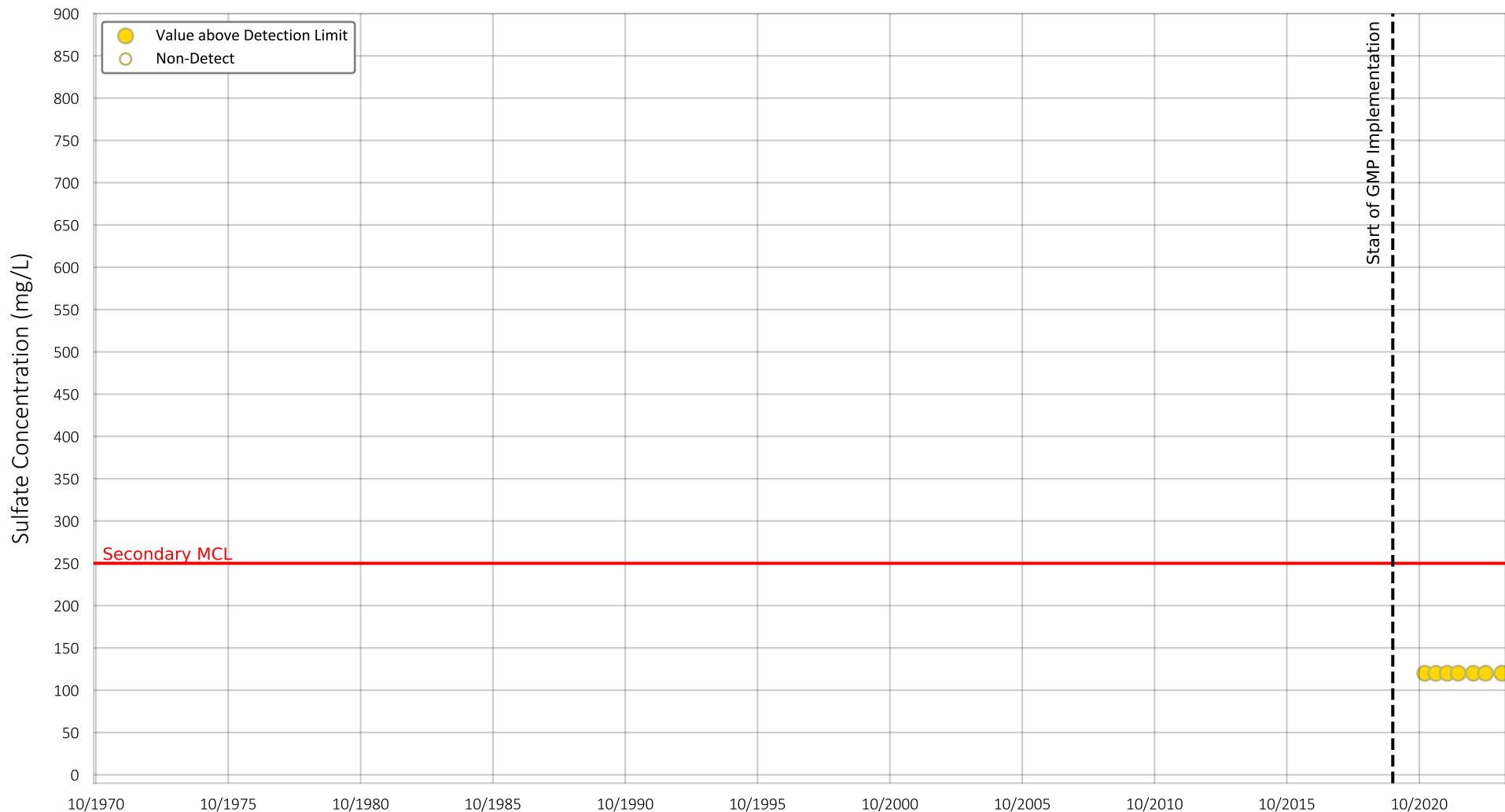


Prepared by:



Sulfate Concentration  
 Well Name: MW-5B (West-Upper)  
 State Well ID: 011S007E07R002S  
 Well Depth (ft): 160  
 Perforated Interval (ft): 45 - 340

Figure G-59



Location of Well in Borrego Springs

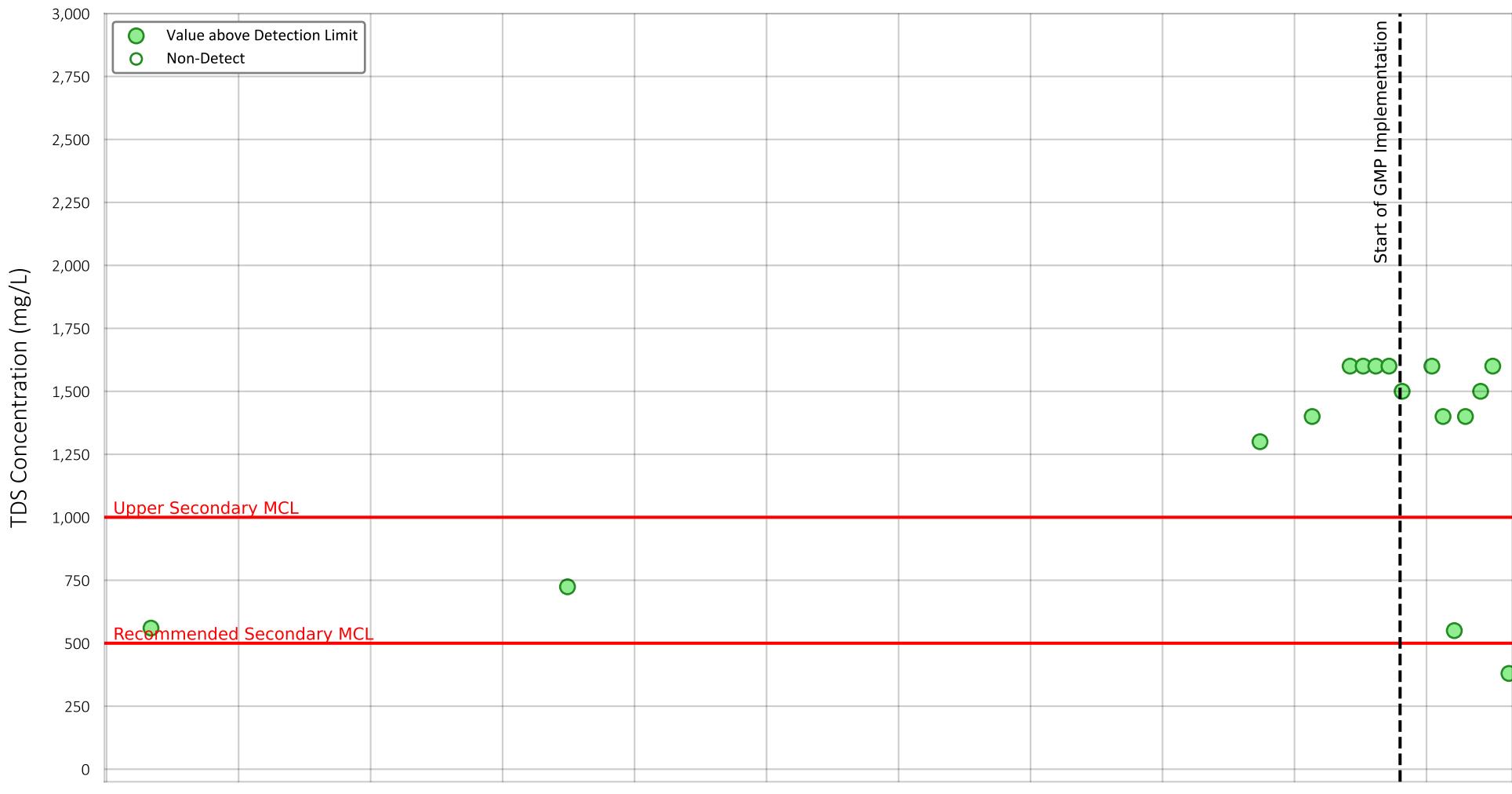


Prepared by:



Sulfate Concentration  
 Well Name: MW-1  
 State Well ID: 010S006E21A002S  
 Well Depth (ft): 900  
 Perforated Interval (ft): 800 - 890

Figure G-60



Location of Well in Borrego Springs

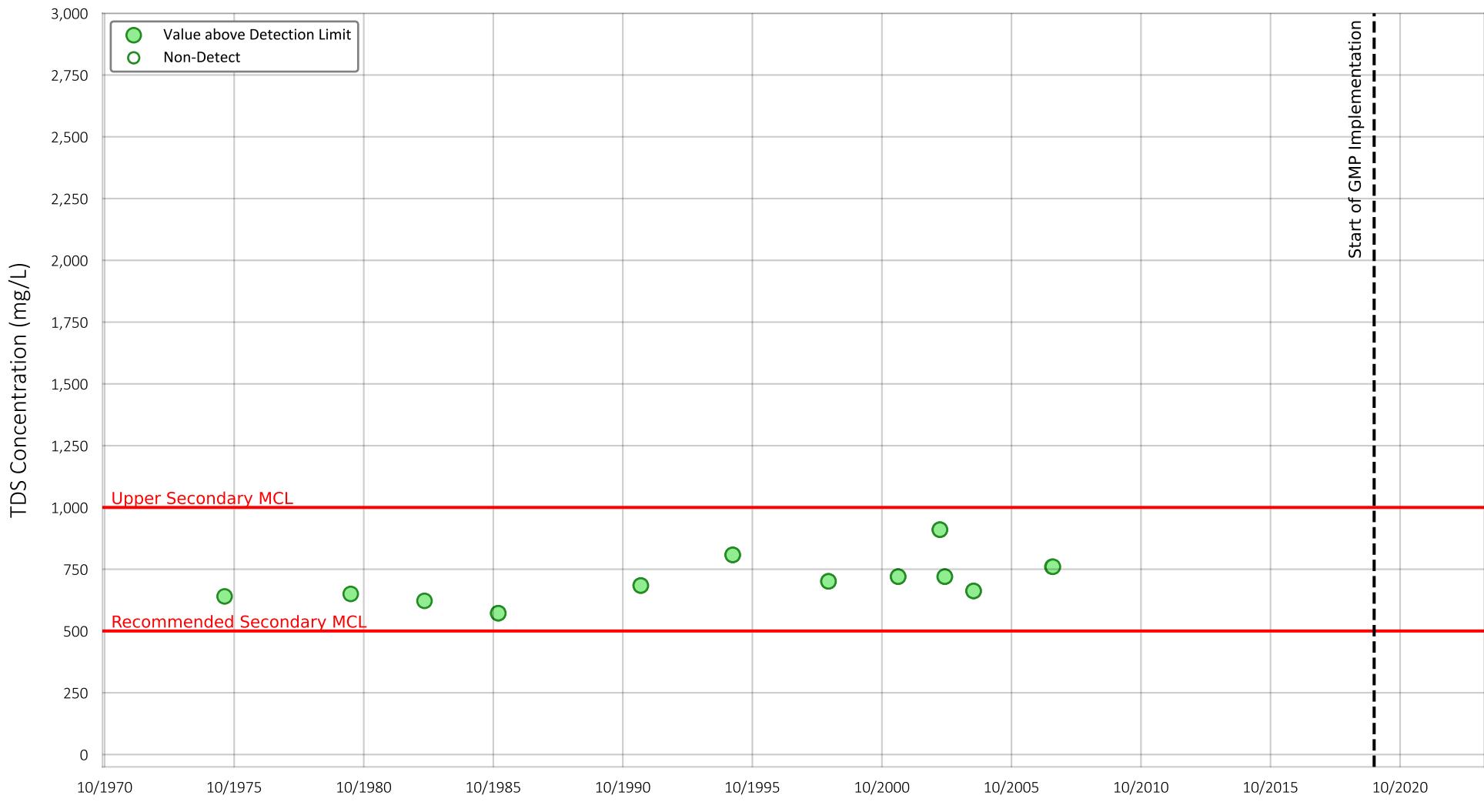


Prepared by:



TDS Concentration  
 Well Name: RH-1 (ID1-1)  
 State Well ID: 011S006E25A001S  
 Well Depth (ft): 600  
 Perforated Interval (ft): 180 - 580

Figure G-61



Location of Well in Borrego Springs

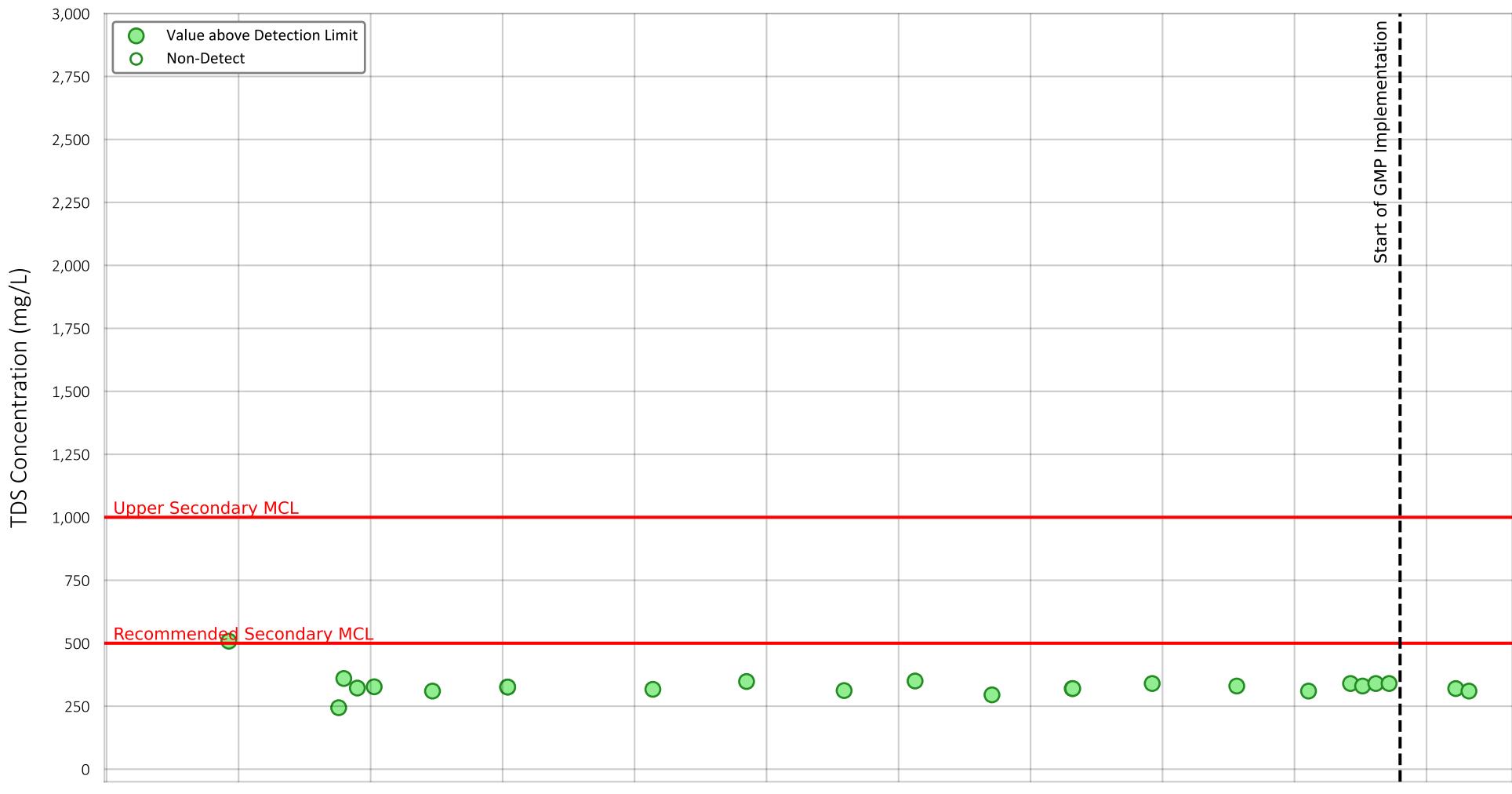


Prepared by:



TDS Concentration  
 Well Name: ID4-3  
 State Well ID: 010S006E18R001S  
 Well Depth (ft): 621  
 Perforated Interval (ft): no data - no data

Figure G-62



Location of Well in Borrego Springs

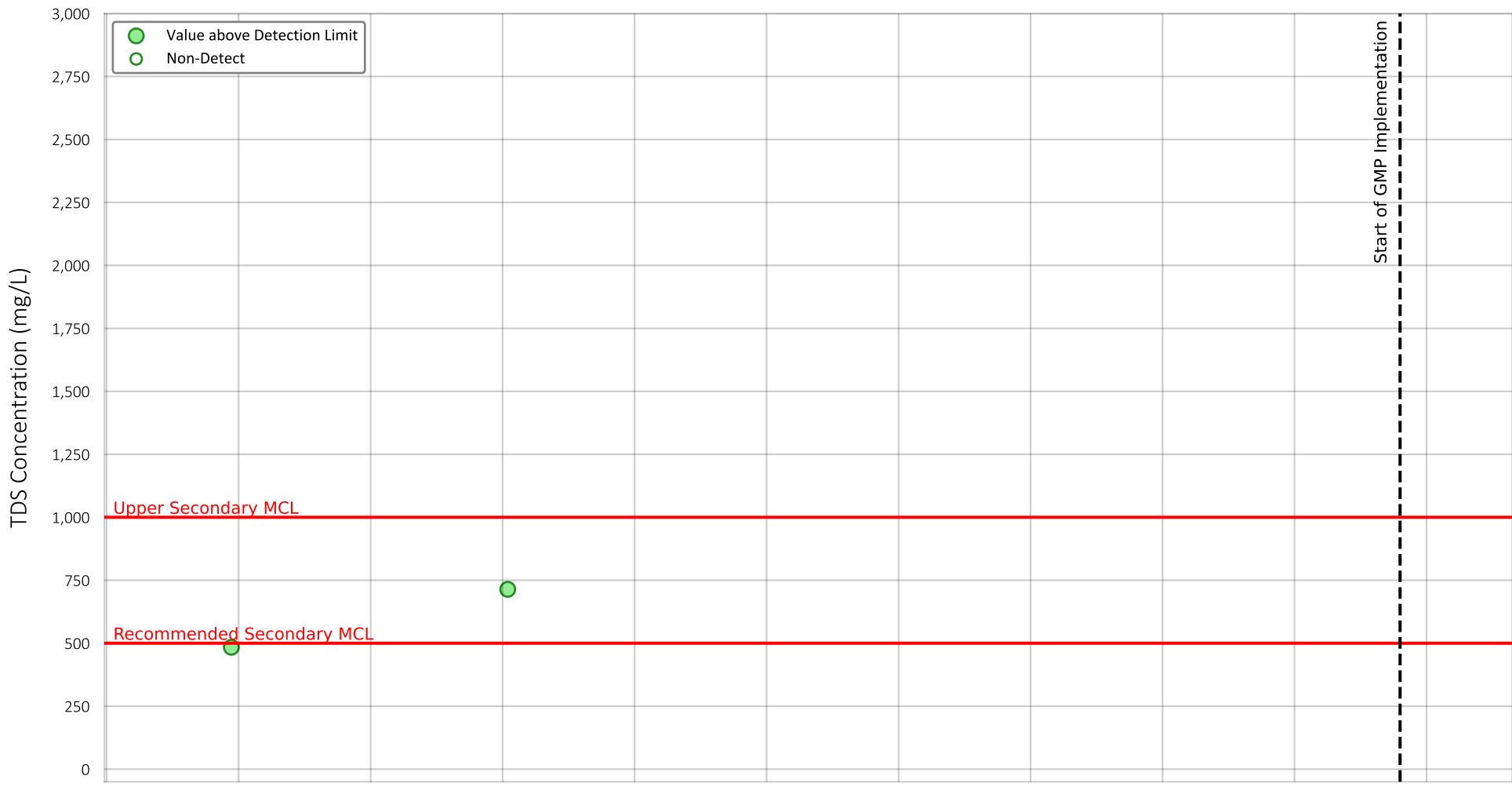


Prepared by:



TDS Concentration  
 Well Name: ID4-4  
 State Well ID: 010S006E29K002S  
 Well Depth (ft): 802  
 Perforated Interval (ft): 470 - 786

Figure G-63



Location of Well in Borrego Springs

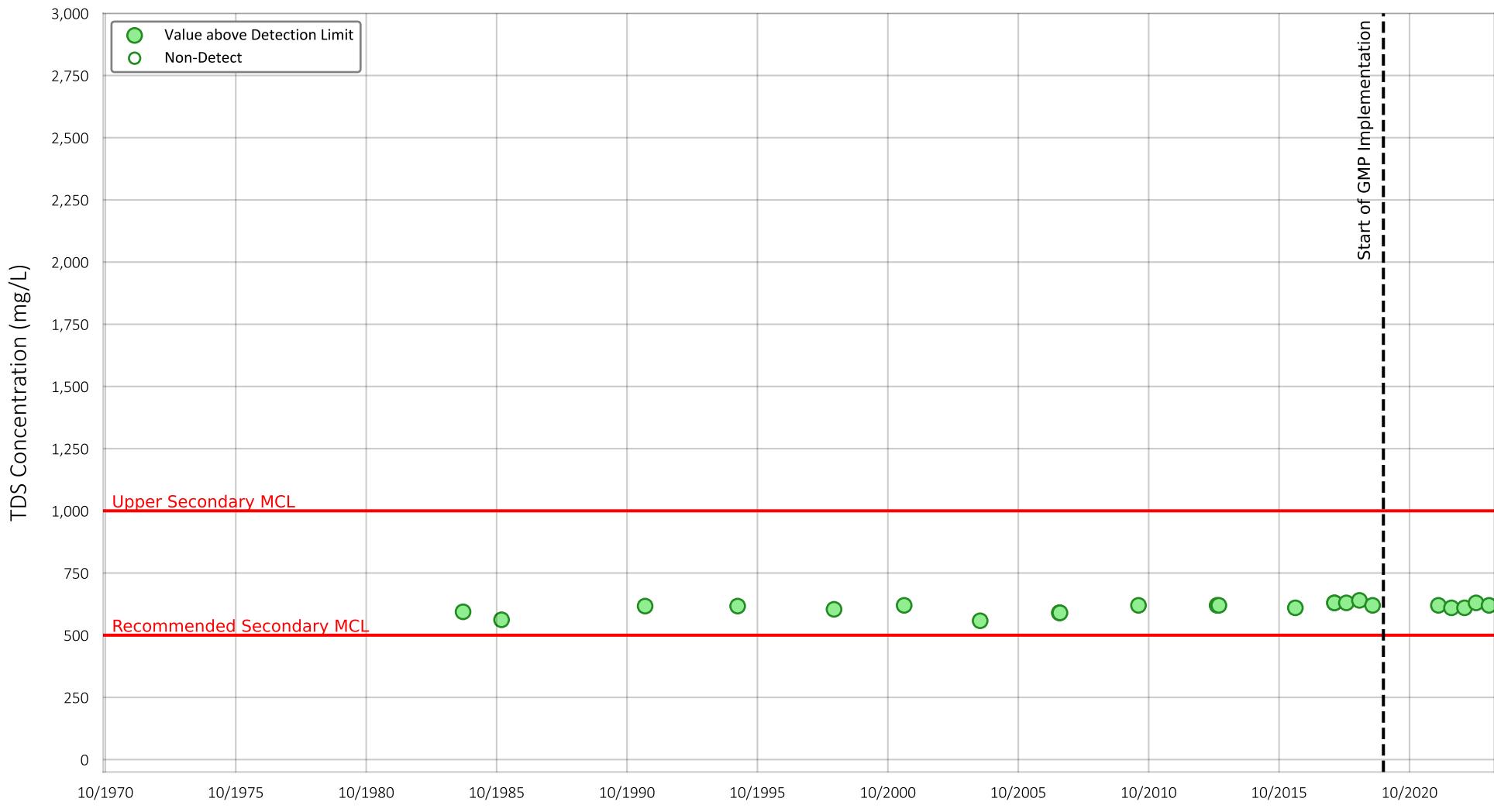


Prepared by:



TDS Concentration  
Well Name: ID4-1  
State Well ID: 010S006E32R001S  
Well Depth (ft): no data  
Perforated Interval (ft): no data - no data

Figure G-64



Location of Well in Borrego Springs

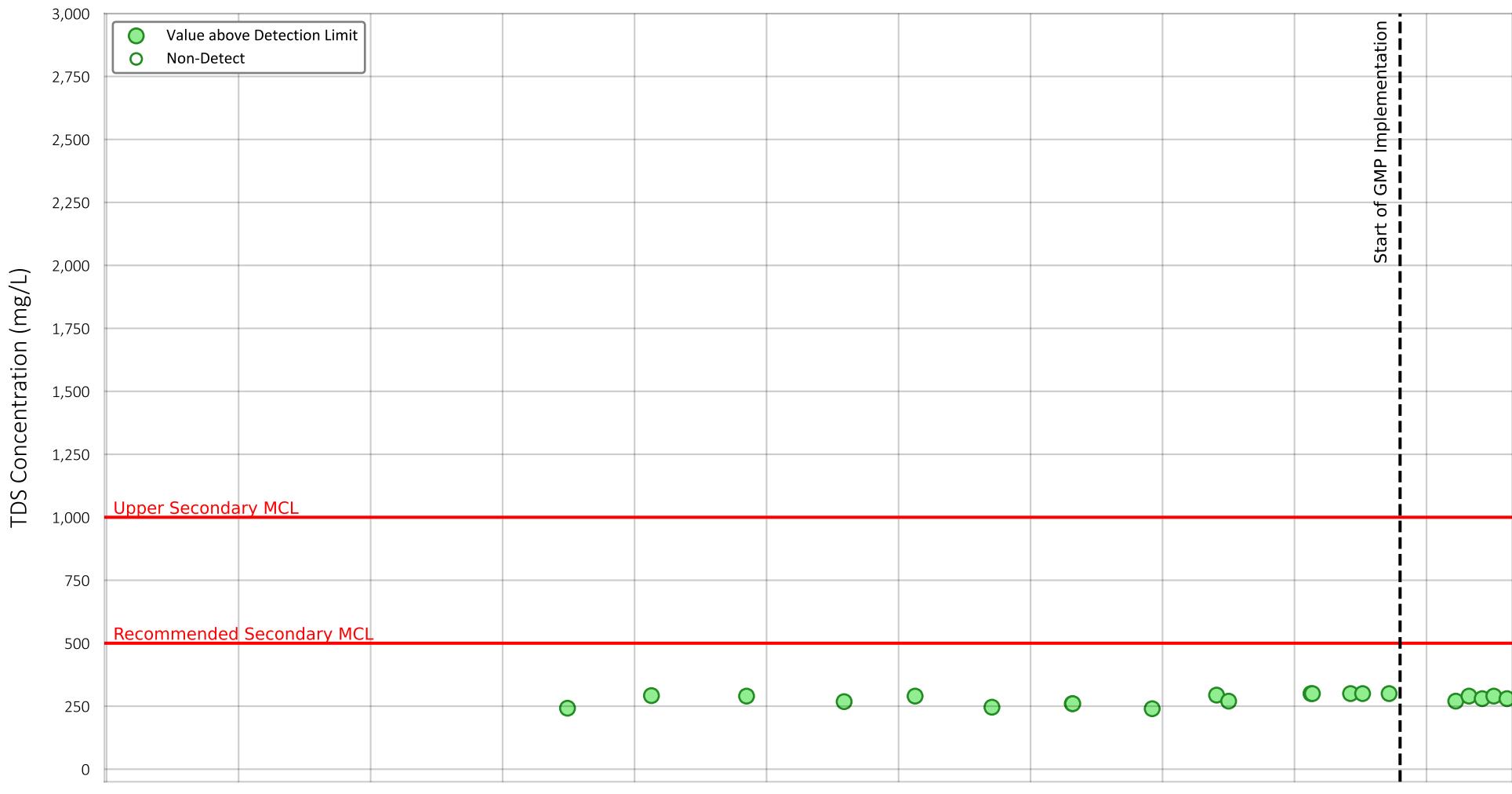


Prepared by:



TDS Concentration  
 Well Name: ID4-18  
 State Well ID: 010S006E18J001S  
 Well Depth (ft): 570  
 Perforated Interval (ft): 240 - 560

Figure G-65



Location of Well in Borrego Springs

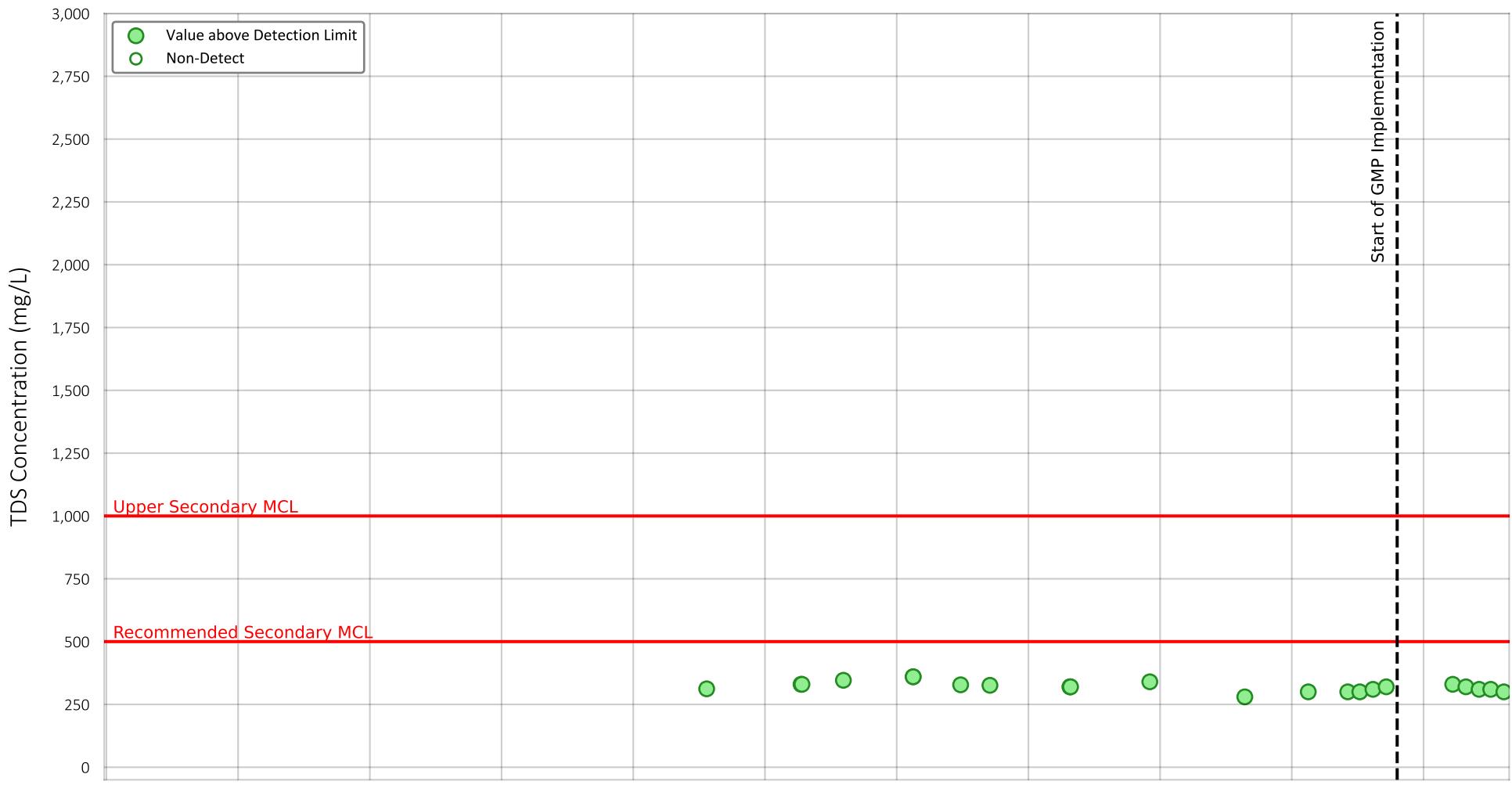


Prepared by:



TDS Concentration  
 Well Name: ID1-12  
 State Well ID: 011S006E16A002S  
 Well Depth (ft): 580  
 Perforated Interval (ft): 248 - 568

Figure G-66



### Location of Well in Borrego Springs

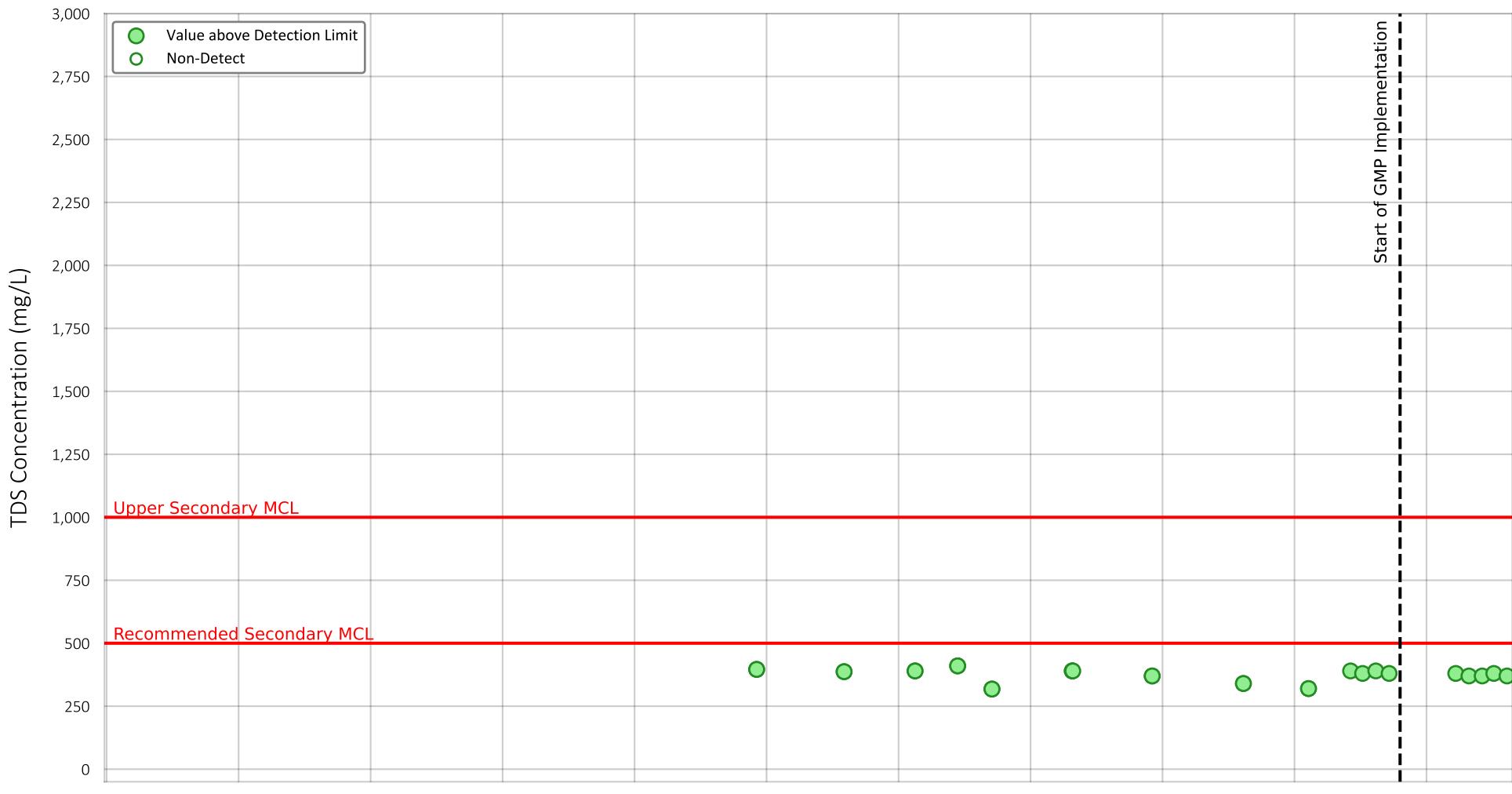


Prepared by:



TDS Concentration  
Well Name: ID1-16  
State Well ID: 011S006E16N001S  
Well Depth (ft): 705  
Perforated Interval (ft): 160 - 549

Figure G-67



Location of Well in Borrego Springs



Prepared by:



TDS Concentration  
Well Name: ID4-11  
State Well ID: 010S006E32D001S  
Well Depth (ft): 770  
Perforated Interval (ft): 450 - 760

Figure G-68



Location of Well in Borrego Springs

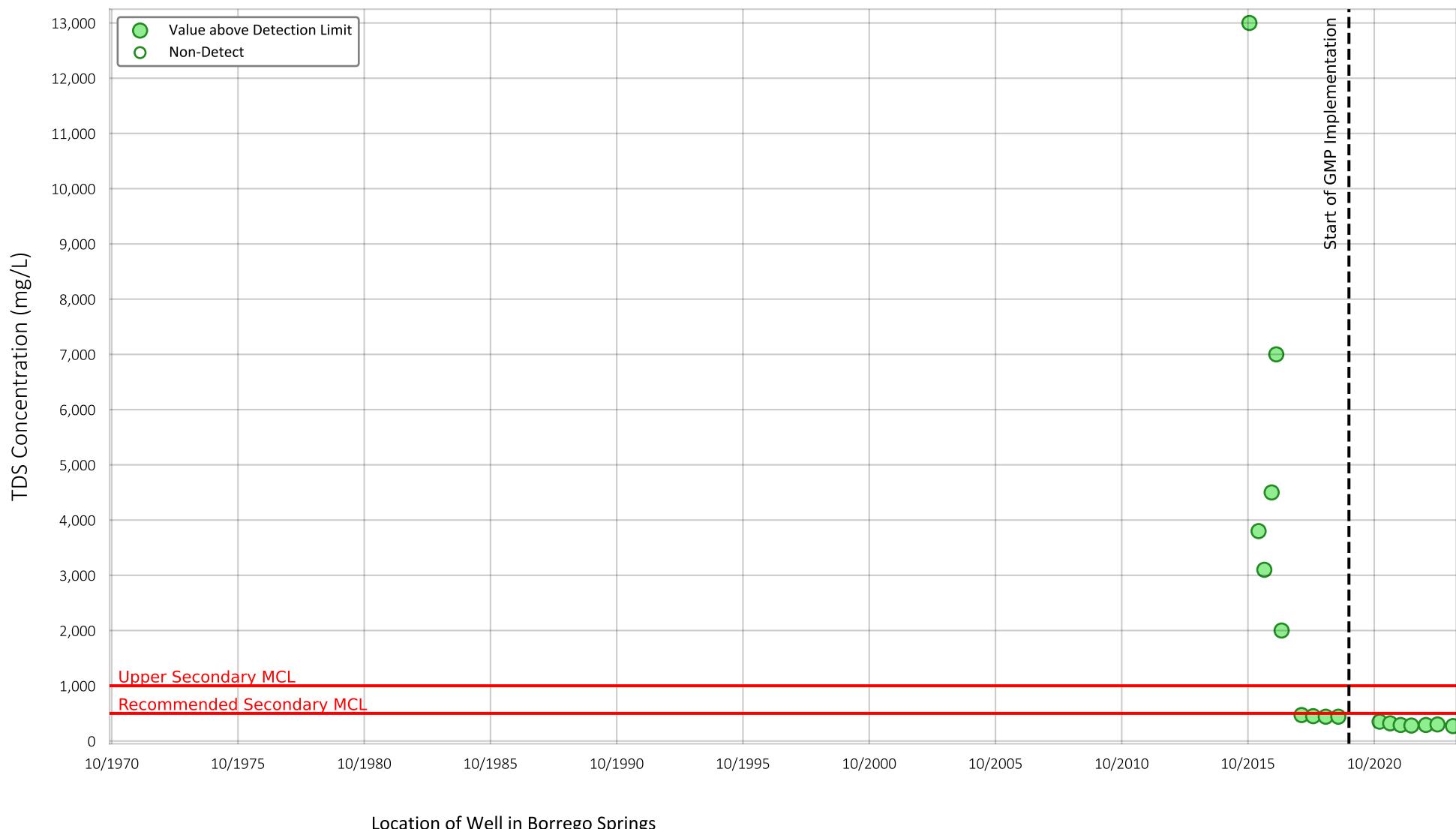


Prepared by:



TDS Concentration  
Well Name: ID5-5  
State Well ID: 011S006E09E001S  
Well Depth (ft): 700  
Perforated Interval (ft): 400 - 700

Figure G-69



Location of Well in Borrego Springs

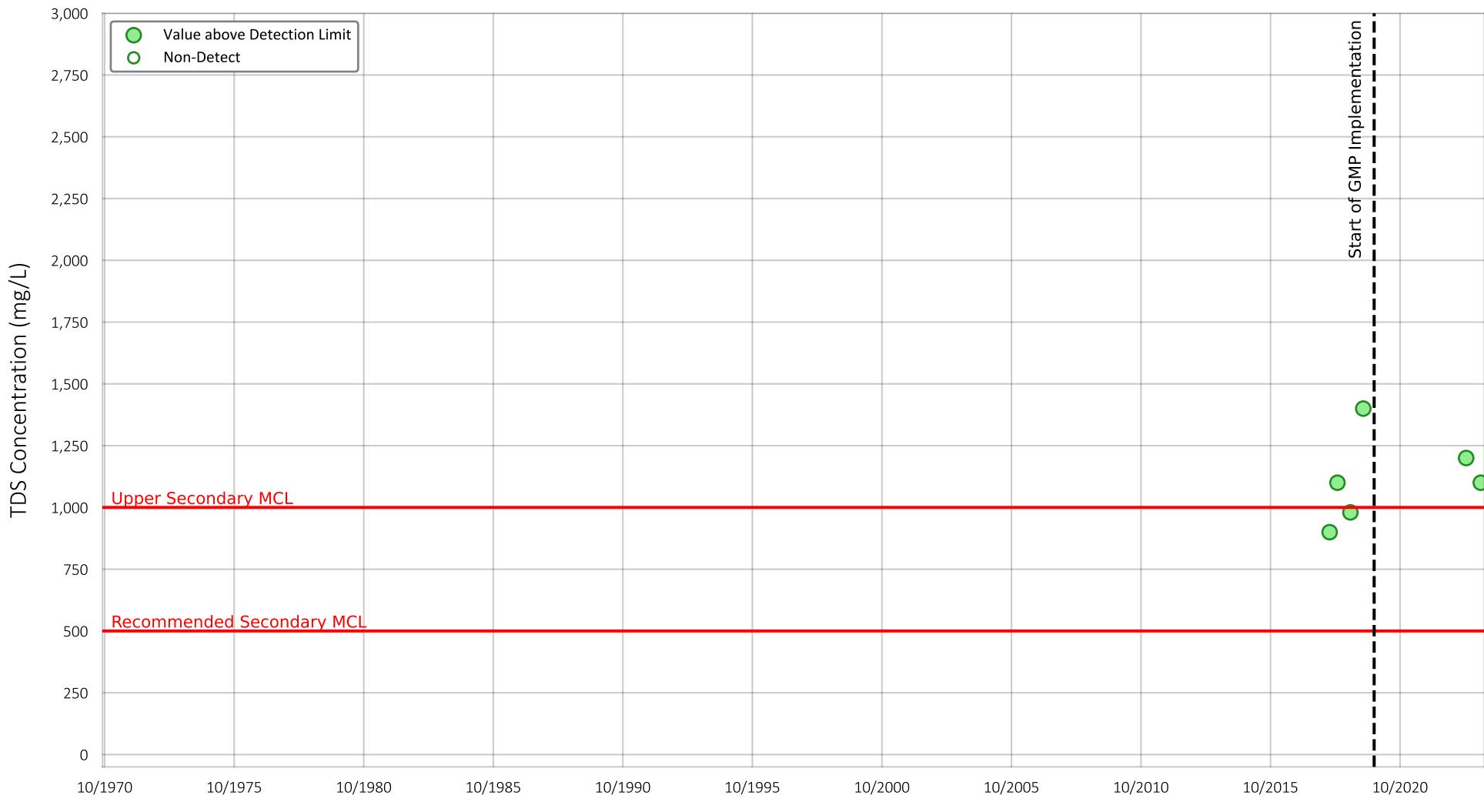


Prepared by:



TDS Concentration  
Well Name: MW-3  
State Well ID: 011S006E23J002S  
Well Depth (ft): 325  
Perforated Interval (ft): 175 - 331

Figure G-70



Location of Well in Borrego Springs



Prepared by:



TDS Concentration  
 Well Name: Fortiner  
 State Well ID: 010S006E09N001S  
 Well Depth (ft): 560  
 Perforated Interval (ft): 250 - 607

Figure G-71



Location of Well in Borrego Springs

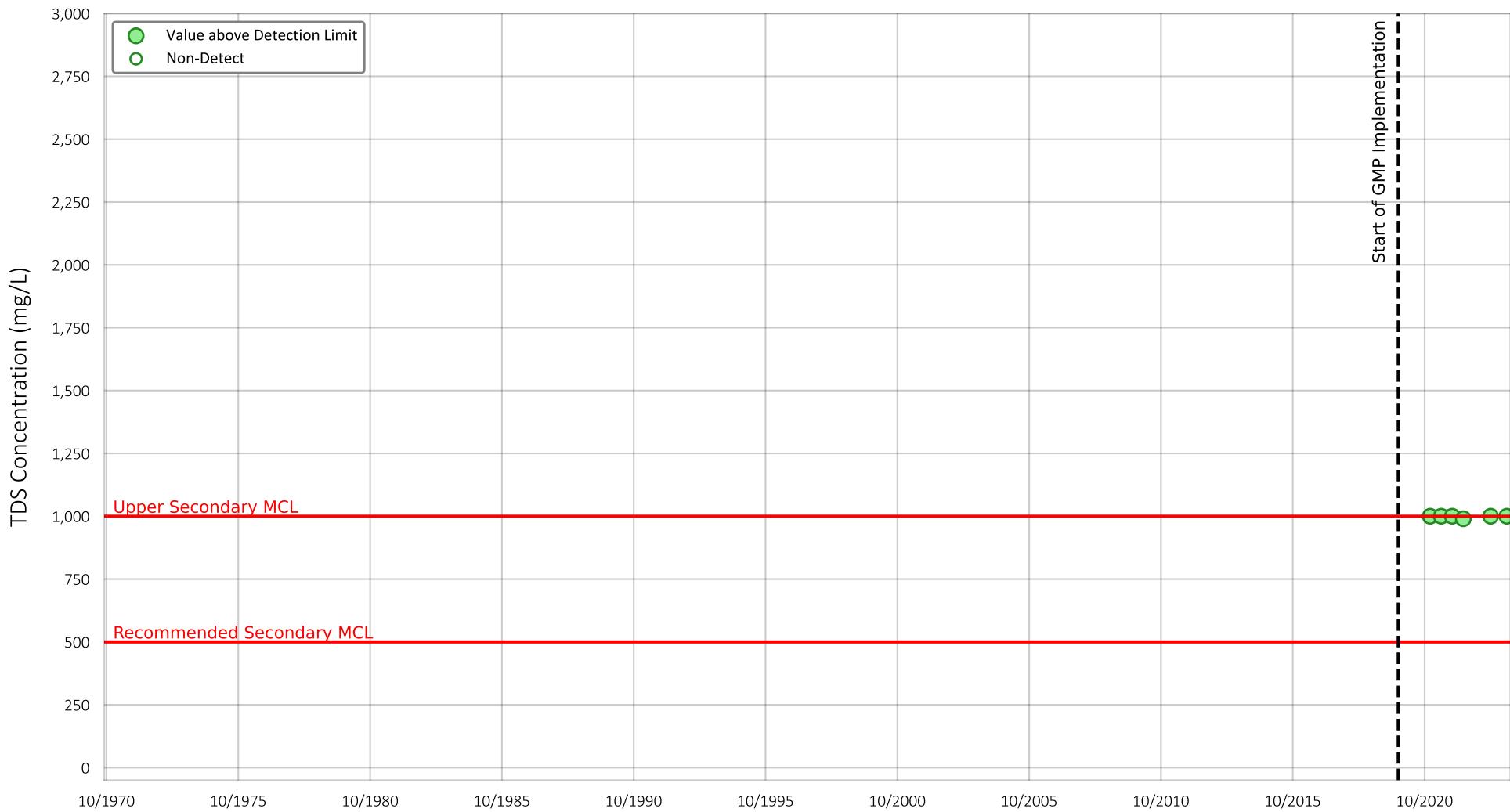


Prepared by:



TDS Concentration  
 Well Name: Air Ranch Well 4  
 State Well ID: 011S007E30L001S  
 Well Depth (ft): 380  
 Perforated Interval (ft): 120 - 380

Figure G-72



Location of Well in Borrego Springs

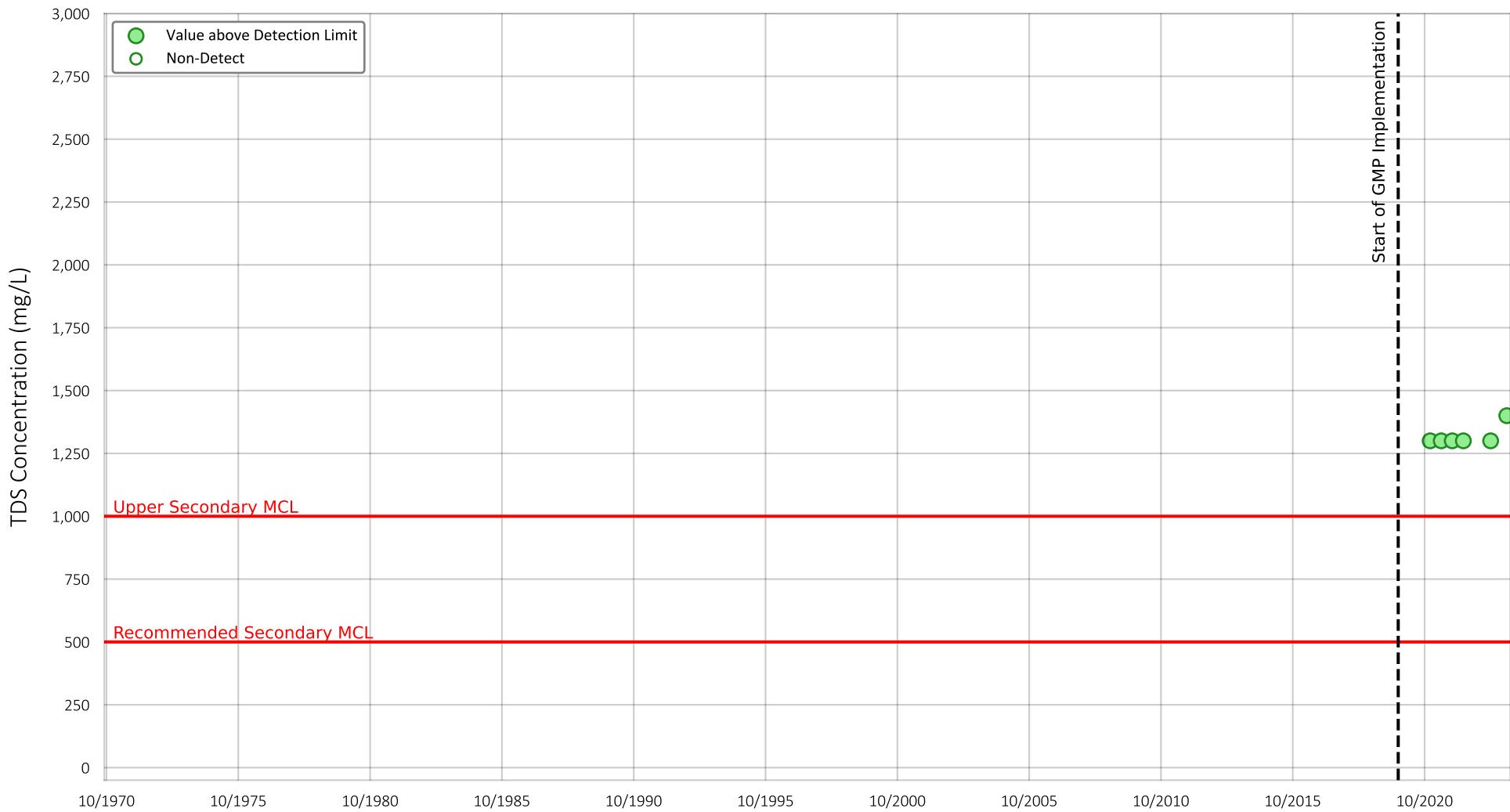


Prepared by:



TDS Concentration  
 Well Name: MW-5A (East-Lower)  
 State Well ID: 011S007E07R001S  
 Well Depth (ft): 345  
 Perforated Interval (ft): 50 - 160

Figure G-73



Location of Well in Borrego Springs

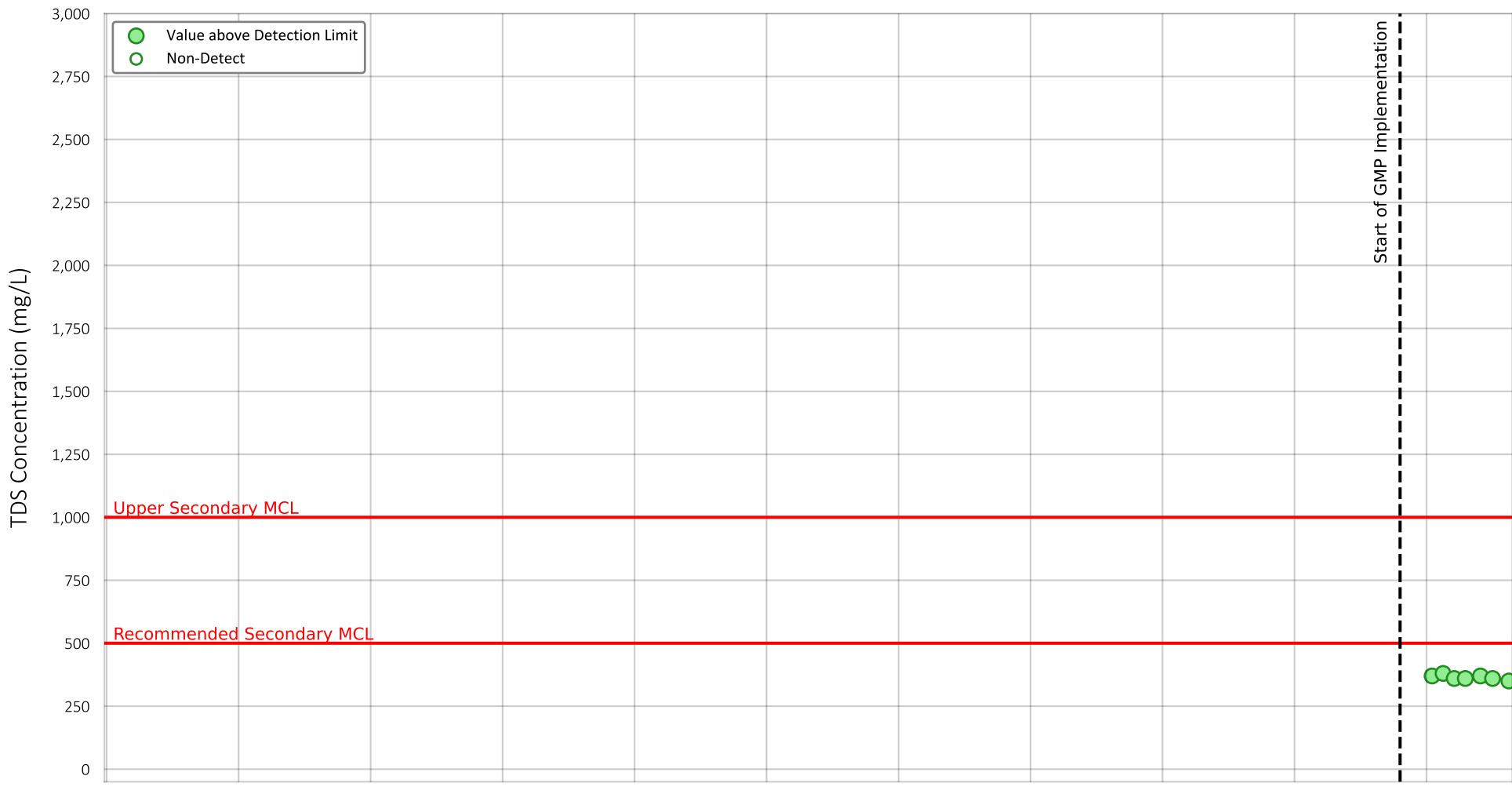


Prepared by:



TDS Concentration  
 Well Name: MW-5B (West-Upper)  
 State Well ID: 011S007E07R002S  
 Well Depth (ft): 160  
 Perforated Interval (ft): 45 - 340

Figure G-74



Location of Well in Borrego Springs



Prepared by:



TDS Concentration  
 Well Name: MW-1  
 State Well ID: 010S006E21A002S  
 Well Depth (ft): 900  
 Perforated Interval (ft): 800 - 890

Figure G-75

## Appendix H

### Response to Comments on the January 25, 2024 Draft Annual Report

## Appendix H

### Response to Comments on the Draft Water Year 2023 Annual Report

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Watermaster received and responded to the following comments on the January 25, 2024 draft of the *Water Year 2023 Annual Report for the Borrego Springs Subbasin*. The comments and responses are found in this Appendix H on the pages noted in parentheses.

- Verbal comments received during the February 8, 2024 Public Hearing (Pages 1-2)
- Written comments from Michele Staples (Jackson Tidus), on behalf of AAWARE (Pages 2-5)
- Written comments from Trey Driscoll (INTERA), on behalf of BWD (Pages 6-9)
- Written comments from Jim Bennet on behalf of the County of San Diego (Pages 10-11)
- Written comments from Tom Watson (Aquilogic), on behalf of T2 Borrego (Page 12)

All written comments received are available on Watermaster's website at this link:

### Verbal Comments Received During February 8, 2024 Public Hearing

- 1) **Michele Staples (Representing AAWARE)**— Ms. Staples provided verbal comments which were reflective of the written comments received on February 6, 2024.
  - **Response:** See response to written comments from Michele Staples (Pages 2-5 of this Appendix H).
- 2) **Trey Driscoll (INTERA, TAC member representing BWD)** – Mr. Driscoll provided verbal comments consistent with written comments submitted on February 16, 2024.
  - **Response:** See response to written comments from Trey Driscoll (Pages 6-9 of this Appendix H)
- 3) **Shannon Smith (Watermaster Director, Recreation) - [Executive Summary / Carryover]**: Director Smith recommended that the report highlight that Carryover is operating as intended in the Judgment, such that Carryover is the first water produced each year. For example, in water year (WY) 2023, Carryover accounted for 7,003.82 acre-feet (af) out of 17,224.95 af of total WY 2023 pumping (as shown in Table 16).
  - **Response:** A note was added to the Executive Summary and Section 4.3 that the Water Rights Accounting process provides for a transparent demonstration that the Carryover provisions of the Judgment are being implemented as intended, such that Carryover is the first water produced each year, and that Carryover elections are being managed to ensure that no Party has more than 2x Baseline Pumping Allocation (BPA) held as Carryover.
- 4) **Jim Bennett (Director, County of San Diego) - [Section 5.5.2.2. Methods for Estimating for Estimating Annual Change in Groundwater Storage]**: In response to Ms. Staples's comments, Mr. Bennett noted that the method used to estimate the change in groundwater storage will be revisited following the Redetermination of the Sustainable Yield.
  - **Response:** The full context of Michele Staples's comment regarding the estimate of the change in storage is provided in her written Comment No. (6). The text of the report was updated in Section 5.5.2.2 to note that the TAC has discussed reviewing and updating the

## Appendix H

### Response to Comments on the Draft Water Year 2023 Annual Report

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methods to compute change in storage following completion of the update for the Borrego Valley Hydrologic Model (BVHM) for the redetermination of the Sustainable Yield.

- 5) **Tyler Bilyk (Watermaster Director, Agriculture):** Director Bilyk stated that determination of the Sustainable Yield is an iterative process and encouraged the Board and TAC to view it as such and to continue to make iterative improvements.
  - **Response:** As part of the 2025 Redetermination of Sustainable Yield, the TAC will be developing recommendations for any improvements to the model, methodology, or other aspects of the process. The recommendations will be formulated into a scope of work to be performed ahead of the 2030 Redetermination of the Sustainable Yield. Pursuant to the Judgment, the Watermaster must approve a recommended scope of work for future technical work by January 1, 2025.
- 6) **Tyler Bilyk (Watermaster Director, Agriculture) - [Executive Summary]:** Director Bilyk commented that the “wet year” in WY 2023 is heavily weighted in the conversation regarding the reduction in pumping, which may deemphasize the progress the Pumpers have made in increasing irrigation efficiency and reducing pumping to reach sustainability. He recommended that until the impact of wet years on pumping is better understood, there should be less reliance on the explanation that the reduction in pumping is due to a wet year.
  - **Response:** Text in the Executive Summary has been updated to highlight key successes in the Basin, including achieving cumulative pumping reductions in excess of the Rampdown (which are not attributed to a “wet year”).

### Written Comments from Michele Staples on behalf of AAWARE— Received February 6, 2024

- 1) **Comment – [Section 3.4 Redetermination of Sustainable Yield]:** “Please add the following information: During WY 2023, the TAC member for AAWARE identified an approximate 4,000AF underestimation of irrigation return flow that should be accounted for in calculating sustainable yield. Specifically, the 4,000AF difference between FMP estimated pumping and metered pumping in 2021 was not consumed by irrigation and so would have had to re-infiltrate as return flows. These return flows are an important part of the basin water budget and need to be accounted for.
- AAWARE’s TAC member provided TAC with data from OpenET for 2021 that independently confirms the 4,000AF underestimation of return flow. As described on the OpenET website, “OpenET provides satellite-based estimates of the total amount of water that is transferred from the land surface to the atmosphere through the process of evapotranspiration (ET). This is also referred to as “actual ET” since it represents an estimate of the actual amount of ET that occurred.” With satellite images dating back to 1985, OpenET is a tool that should be used to estimate actual ET in irrigated areas. (See attached email to Andy Malone from Dave Peterson dated September 8, 2023; Judgment, p. 20, Section III.F(3) [“The revised determination of Sustainable Yield will consider all sources of replenishment, including return flows and underflows, and all outflows from the Basin, and will consider, among other data, information derived from updated runs of the BVHM”].”

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### Response to Comments on the Draft Water Year 2023 Annual Report

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— **Response:** As discussed with Ms. Staples and the AWARE TAC representative (Bob Wager), this comment is based on a misunderstanding of the Technical Consultant's work. The Technical Consultant has been working with Mr. Wager to resolve the misunderstanding through the TAC process. A full response to this comment is premature as the discussion is ongoing. The TAC will continue with its process to resolve the misunderstanding and document any differences of opinion on the methods to compute Sustainable Yield, or the Sustainable Yield itself. All TAC comments are documented in TAC deliverables that are posted to the [TAC webpage](#) on the Watermaster's website. Ultimately, the TAC will prepare a TAC Recommendation Report to the Board on the 2025 Redetermination of the Sustainable Yield, which will describe the differences in TAC member opinions, if any.

It should also be noted that it is not the practice of the Watermaster to document all TAC input and opinions discussed through the TAC process within the Annual Report. The Annual Report functions to report out the key activities, work products, and formal recommendations to the Board during the reporting period. As noted above, all comments and input from the TAC are captured through a variety of means, including TAC meeting minutes, posting of TAC comments, and preparing response to TAC comment tables/documents for final deliverables. A final difference of opinion on a final TAC recommendation to the Board will be documented in the Annual Report (see for example the discussion related to Table 11 of the 2023 Annual Report).

2) **Comment – [Section 5.4.1.1 Methods for Estimating Groundwater Pumping]:** *"Please include the following information in Paragraph 1, Model-estimated: AWARE's TAC representative recommended using Open ET as a more reliable estimate of historical pumping. With satellite images dating back to 1985, OpenET is a tool that should be used to estimate actual ET in irrigated areas. (See attached email to Andy Malone from Dave Peterson dated September 8, 2023.)"*

— **Response:** The use of OpenET was not planned for in the Board-approved method to redetermine Sustainable Yield for 2025. That said, OpenET is a data source that has been, and will continue to be, considered by the Technical Consultant and the TAC to estimate the water budget of the Basin. And, as discussed with Ms. Staples, Mr. Wagner, and the Board, there may be an opportunity to use OpenET data as a means of verifying the BVHM estimates of evapotranspiration (ET). A full response to this comment on the use of OpenET is premature to include here, or in the Annual Report, as the discussion is ongoing. The TAC will proceed with its process to finalize the approach to redetermine the Sustainable Yield (Tasks 4 and 5).

See also second paragraph of the response to your Comment (1) above.

3) **Comment – [Section 5.4.1.1 Methods for Estimating Groundwater Pumping]:** *"Please include the following information in Paragraph 2, Water Duty Method: Because these crop-specific water-use factors are based on literature, they do not represent the real conditions in the Borrego Springs Basin. The use of the water-use factors overestimates the actual ET and therefore, underpredicts the amount of recharge (return flows) to the unsaturated zone."*

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### Response to Comments on the Draft Water Year 2023 Annual Report

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- **Response:** Addition of this note is beyond the level of detail required for the Annual Report. A detailed description of Task 2 in the 2025 Redetermination of the Sustainable Yield – *Update Water Use Factors* is documented in a TM, which is available on the Watermaster’s website.<sup>1</sup> The TM documents the sources of the water use factors (specifically, crop coefficients and on-farm efficiency) evaluated and modified in the BVHM under the scope of Task 2 and discusses the impact of the water use factors on the water budget. The final report of the 2025 Redetermination of Sustainable Yield will include the appropriate discussion of the limitations of this and other data/methods used to compute Sustainable Yield.
- 4) **Comment – [Figure 6. History of Groundwater Pumping Compared to Rampdown Schedule (WY 1945-2040):]** *“Please correct the key label for “Sustainable Yield” to read “Initial Sustainable Yield”. (See Judgment, p. 15, Section II.E.)”*
  - **Response:** The label in the legend of Figure 6 was updated to read “Initial Sustainable Yield”.
- 5) **Comment – [Figures 12a-12p]:** *“Please include an inset for each figure showing the location of the well, similar to Figure 9 on page 78 (pdf p. 86)”*
  - **Response:** This a useful recommendation that will be used to improve these figures in the future. Although the Figures 12a-12p were not able to be revised due to time and budget constraints for this Annual Report, Figure 2 was revised to identify and label the Representative Monitoring Wells by name and the report text describing Figures 12a through 12p was updated to direct the reader to review Figure 2 to identify the location each well.
- 6) **Comment – [Figures 10 and 14]:** *“The circular 400-foot contours on these figures might need to be corrected. Spring 2022 Groundwater Elevation (Figure 10) and Spring 2023 Groundwater Elevation (Figure 14), used to calculate storage change, show circular 400-foot contours around several wells, which suggests they represent local pumping depressions. However, using the same data, a 400-foot contour can be constructed (see Attachment 2, markup of Groundwater Elevation Figure) to show a more basin-wide contour that appears more consistent with other contours on the map. The Watermaster also should consider whether this alternative contour map affects the storage change calculation.”*
  - **Response:** The change in storage calculation from spring 2022 to spring 2023, including the noted contour maps, was presented the TAC for review and comment during the November 1, 2023 TAC meeting. Based on TAC feedback,<sup>2</sup> a note was added to the groundwater-elevation contour maps to indicate that the maps are intended to be used to represent regional conditions and are not for site-specific purposes. Additionally, the

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<sup>1</sup> Available at: [borregospingswatermaster.com/wp-content/uploads/2023/08/III\\_BVHM-Task-2.pdf](https://borregospingswatermaster.com/wp-content/uploads/2023/08/III_BVHM-Task-2.pdf)

<sup>2</sup>TAC comments are summarized in the meeting minutes from the November 1, 2023 TAC meeting, available on the Watermaster’s website at: [https://borregospingswatermaster.com/wp-content/uploads/2023/11/20231101-Meeting-Minutes\\_final.pdf](https://borregospingswatermaster.com/wp-content/uploads/2023/11/20231101-Meeting-Minutes_final.pdf)

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### Response to Comments on the Draft Water Year 2023 Annual Report

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TAC discussed that the storage change method used is appropriate for annual reporting purposes. The change in storage estimate was also presented to the Watermaster Board during the December 14, 2023 Board meeting, where TAC comments were presented. No changes were made to the storage analysis based on the Board discussion.

As noted by Director Jim Bennett during the February 8, 2024 Annual Report Hearing, and as discussed during the November 1, 2023 TAC meeting, the method used to estimate the change in storage for the Annual Report may evolve over time. The TAC has identified that the method to estimate the change in storage should be re-evaluated following the 2025 Redetermination of the Sustainable Yield, such as using results from the BVHM and improving the contouring techniques for groundwater elevations. The text of Section 5.5.2.2 was updated to include this information.

- 7) **Comment – [Figure 16]:** *"Please include the figure attached to this letter as Attachment 3, titled Storage Change Results Spring 2022 to Spring 2023 in the Annual Report, either in place of Figure 16 or in addition to Figure 16. The attached figure was previously presented to the TAC. As noted on the attached figure, storage change was calculated for the area inside the "mask" (heavy black lines) and was estimated/interpolated for areas outside the mask. Since the mask area is only about half of the overall Basin area, the storage change calculation should be considered approximate."*

*Presumably, as the monitoring network is expanded over time and the area covered by the storage area mask is also expanded, the annual estimated change in storage will become increasingly more accurate. Including the attached figure in the 2023 Annual Report and updating it in future Annual Reports will show the increasing accuracy of the Change in Storage calculations."*

- **Response:** The "mask" shows the extent of the measured groundwater-level data at wells that was used to estimate (approximate) the storage change. The calculation of storage change within this mask area is used by the TAC as a check on the storage change estimate for the entire Basin.

We do not recommend including the mask on Figure 16 (or the storage change estimate that was made within the mask area) because it may cause confusion for the reader. We believe the mask area (and the storage change calculation within the mask area) remain as "internal check" on the storage change calculation that is reviewed with the TAC.

You are correct that as the monitoring network is expanded over time, the estimate of the change in storage should improve. Improvements in the calculation of the change in storage may also be attributable to other improvements in the data and tools available to the Watermaster, such as improved understanding of aquifer properties (from new wells or improved model calibration).

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### Response to Comments on the Draft Water Year 2023 Annual Report

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#### Written Comments from Trey Driscoll (INTERA) on behalf of Borrego Water District – Received February 16, 2024

- 1) **Comment** - *“General edits such as punctuation, grammar, rewording suggestions are provided as track changes in a MS Word version of the WY 2023 Annual Report provided herewith.”*
  - **Response:** The text has been updated, where appropriate, based on edits suggested in the Word version received.
- 2) **Comment** – *“While sustainable management criteria were not established for the sustainability indicator land subsidence, Interferometric Synthetic Aperture Radar (InSAR) data and global positioning system (GPS) station data available from DWR should be presented in the WY 2023 Annual Report to demonstrate that land subsidence continues to not be an applicable sustainability indicator for the Borrego Springs Subbasin. Cumulative vertical displacement measured from June 2015 to October 2023 indicates maximum subsidence of up to 0.12 feet focused on the center of the Basin in the vicinity of the Borrego Sink (Figure 1). The InSAR accuracy is 0.06 feet at a 95% confidence level meaning that half the subsidence (0.06 ft) is within the uncertainty of the InSAR data. In addition, GPS station data from February 2005 to May 2023 indicates maximum subsidence of 0.098 feet at a location immediately north of the Borrego Springs Airport (Figure 2). This data supports the conclusion in the Groundwater Management Plan that land subsidence is minimal and not interfering with surface land uses in the Basin.”*
  - **Response:** Comment noted. Land subsidence is a topic that will be addressed in the 5-year Assessment of the Groundwater Management Plan (GMP) and is beyond the scope of the Annual Report to address. Given that land subsidence is not identified as a sustainability indicator in the GMP, Watermaster did not perform any activities related to land subsidence during WY 2023.
- 3) **Comment – [Section 5.5.3 Groundwater Quality]:** *“The water quality section of the WY 2023 Annual Report followed California Department of Water Resources (DWR) guidance; however, the WY 2023 Annual report should make better conclusions regarding comparison to sustainability management criteria (i.e., drinking water MCLs [Maximum Contaminant Levels]).”*
  - **Response:** The text in Section 5.5.3 was updated to describe the Minimum Thresholds described in the GMP, which are established to protect existing and potential beneficial uses. While the GMP identifies that the Minimum Threshold for municipal wells is to meet potable drinking water standards specified in Title 22 of the CCR (e.g. MCL), specific concentrations for each COC were not explicitly defined in the GMP for irrigation wells. The GMP states that the goal for irrigation wells is for groundwater quality to meet standards that are “suitable for agriculture use.” As part of the 5-year Assessment of the GMP, more specific Minimum Thresholds for agriculture wells will be considered and recommended for each COC. Because of the lack of quantified Minimum Thresholds to compare against current conditions of groundwater quality in agricultural wells, groundwater quality for all wells in the Basin are compared to MCLs in this Annual Report.

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### Response to Comments on the Draft Water Year 2023 Annual Report

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- 4) **Comment – [Executive Summary and Section 6. Summary of Physical Solution Implementation Process]:** *"Please confirm that the additional well is the TSS being listed, giving DWR credit for funding the project."*
  - **Response:** The new well added to the Watermaster's groundwater monitoring network through public outreach effort described in the Executive Summary and Section 6 is referring to the addition of the T2 Orchard Well. The text was updated in the Executive Summary, Section 3, and Section 6 of the 2023 Annual Report.
- 5) **Comment – [Section 4.3 Adjusted Pumping Calculation for WY 2023]:** *"Consider adding a bullet to Section 4 that compares pumping reduction to the total Baseline Pumping Allocation (BPA) of 24,293 acre-feet to demonstrate status of compliance with the 5% per annum Rampdown."*
  - **Response:** Comparison of the annual pumping relative to the Annual Allocation is a more appropriate way to illustrate status of compliance with the Rampdown. The text in Section 4.3 and the Executive Summary was updated to include a comparison of the WY 2023 total pumping to the WY 2023 Annual Allocation (which is based on an 85% Rampdown).
- 6) **Comment – [Executive Summary]:** *"Recommend adding a few bullets in the Executive Summary here that emphasize the successful implementation of the Judgment. In particular, it should be emphasized that the basin has met Rampdown requirements and is currently ahead of schedule. The Borrego success story needs to be more prominent. In WY 2023, total pumping of 10,430 acre-feet was approximately 50% less than the Annual Allocation of 20,694 acre-feet."*
  - **Response:** Text in the Executive Summary has been updated as suggested.
- 7) **Comment – [Section 3.1.2 Groundwater Levels and Quality Monitoring Program]:** *"Include subsidence in the list of Undesirable Results to be avoided and add information previously presented in the General Comments section."*
  - **Response:** See response to your Comment No. (2).
- 8) **Comment – [Section 3.1.3 Surface Water Monitoring]:** *"Are these visual observations for surface flows summarized somewhere? Do these observations include documenting the wetted extent of surface flow into the Basin? Please describe it in a bit more detail."*
  - **Response:** During each field event, photographs are taken of the five surface water sites. At each site, photographs are taken of the stream facing upstream, downstream, and side-stream. If needed these photographs could be used to make qualitative assessments of changes in the stream width and of surface water depth. The text was updated to describe the documentation of conditions.
- 9) **Comment – [Section 3.2 Technical Advisory Committee, Evaluation of Carryover (Section III.B)]:** *"Will this be added to the TAC (Technical Advisory Committee) meeting agenda in 2024?"*
  - **Response:** Section III.B of the Judgment requires that the Carryover provision for unused Annual Allocation of pumping be re-evaluated in consultation with the TAC. This effort will be included as part of the process to redetermine the Sustainable Yield during 2024.

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10) **Comment – [Section 4.3 Adjusted Pumping Calculation for WY 2023]:** “*The totals column (b) indicates zero with all transfers offsetting. Should the total = 1,997.3 acre-feet?*”

— **Response:** Footnote 47 in the text describes that the net transfer of BPA is always 0 af, as seen on the Totals line of Table 16 for column (b). 1,997 af represents the amount of BPA that was transferred between Parties during WY 2023, as is described in the bullet and in Section 4.2.1. No change was made to Table 16 of the 2023 Annual Report.

11) **Comment – [Section 4.3 Adjusted Pumping Calculation for WY 2023]:** “*The total Carryover Leased column also offsets. Should the total be 798.44 acre-feet?*”

— **Response:** Footnote 55 in the text describes that the net Leases and Transfers across all Parties is always 0 af, as seen on the Totals line of Table 16 for column (l). The total Transfer of 798.44 af of Carryover during WY 2023 represents the total amount Transferred between Parties to the Judgment.

12) **Comment – [Section 4.3 Adjusted Pumping Calculation for WY 2023]:** “*This should be emphasized in the Executive Summary in comparison to the WY 2023 Pumping Allocation of 20,652 to illustrate that the Basin is ahead of the Rampdown schedule to achieve sustainability. Otherwise it is not clear to the uninformed reader.*”

— **Response:** Text was added to the Executive Summary.

13) **Comment – [Section 5.4.1.2 Groundwater Pumping in WY 2023]:** “*Has any analysis been performed to document acres fallowed by year to help quantify annual reduction in pumping due to fallowing for Agriculture and Recreation? Otherwise may be unclear to uninformed why there is such a significant reduction in pumping. While it is important to explain differences in water estimates (duty factor vs. metered), we do not want the reader to be led to the conclusion that the difference is due to the accuracy of estimates. Reduction in pumping is due to fallowing that has occurred every year in the Basin (emphasis added).*”

— **Response:** No such analysis has been performed (or scoped) to fully document the number of acres that have gone out of production. It should be noted that while some farmland has gone out of production, formal “fallowing” as defined in the Judgment has not occurred since entry of the Judgment in Court. The text was updated to identify that the improvement in monitoring is not driving the decrease in pumping and that reductions in pumping can be attributed to changes such as taking farmland out of production, irrigation efficiency, and in the case of WY 2023, potentially wet climate conditions.

14) **Comment – [Section 5.4.1.2 Groundwater Pumping in WY 2023]:** “*Provide some explanation of the reduction in pumping so DWR and court better understand Basin land use dynamics. It would be helpful to explain to DWR the fallowing that has occurred in the Basin.*”

— **Response:** See response to your Comment No. (13).

15) **Comment – [Section 5.5.1.1 Historical Trends and Current Conditions]:** “*From 1950 to 2023 groundwater levels have declined over 120 feet. The first measurement at ID4-3 was in the early 1980's and does not cover the entire period of record. May want to clarify in text.*”

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- **Response:** A footnote was added that clarifies that groundwater elevation data for ID4-3 is limited to 1980 through 2023.
- 16) **Comment – [Section 5.5.1.1 Historical Trends and Current Conditions]:** “*May want to define [true static]. Groundwater levels can be influenced by daily pumping in the basin so without a pressure transducer measuring continuous sub-daily data, it may not be clear that a reading at a particular well is truly static and influenced by local pumping.*”
  - **Response:** The text was updated to define a “true static” groundwater elevation as a measurement that is not influenced by pumping.
- 17) **Comment – [Section 5.5.1.2 Comparison to Sustainable Management Criteria]:** “*Some of the minimum thresholds (MTs) should be revisited (e.g., ID4-4, ID4-11, ID5-5, ID1-12, South Management Area). This should be completed as part of the 5-year update.*”
  - **Response:** Comment noted. The assessment of Minimum Thresholds will be performed during the 5-year Assessment of the GMP.
- 18) **Comment – [Section 5.5.2.1 Historical Trends and Current Conditions]:** “*Subsidence data should be included, InSAR 2015-2023 changes in vertical elevation as previously described.*”
  - **Response:** See response to your Comment No (2).
- 19) **Comment – [Section 5.5.3 Groundwater Quality]:** “*May want to add some text and conclusion about comparison to the sustainable management criteria (i.e., drinking water maximum contaminant level MCL) as per previous section for groundwater storage. The GMP uses the term “constituents of concern”. Recommend use of the same term to be consistent with GMP nomenclature.*”
  - **Response:** See response to your Comment No. (3). Additionally, “COC” has been redefined as “constituent of concern” in Section 5.5.3 to be consistent with the GMP.
- 20) **Comment – [Figures 18-22]:** “*Figures 18 to 22 would benefit from having an A side: time-series charts of historical COC (Constituent of Concern) concentrations at selected wells of the Management Areas, primary and secondary (if there is a secondary) MCLs for reference. And have a B side: a map that illustrates the spatial distribution of the COC concentrations at all the wells sampled in spring 2023. If going the have an A and B route, please mark A side and include the description on the figure, same for B.*”
  - **Response:** In our opinion, the figures already accomplish what is suggested. Additionally, Appendix G shows time histories of each COC at all Representative Monitoring Wells.

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### Response to Comments on the Draft Water Year 2023 Annual Report

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#### Written Comments from Jim Bennett on behalf of the County of San Diego – Received February 22, 2024

- 1) Comment – [Section 3.1.1.3 Meter Accuracy Testing]: *"Three wells were not tested for accuracy for unknown reasons. Is there follow up by WM staff to address this?"*
  - **Response:** Watermaster Staff notifies Parties via email that they are required to provide the Watermaster with meter verification test results and follows-up with Parties who do not provide test results. Of the three Parties that did not provide meter verification tests in WY 2023, two have provided meter verification tests for WY 2024. Watermaster will continue to communicate with Parties in an effort to receive all meter verification tests. The text of the report was updated to reflect the process.
- 2) Comment – [Section 3.1.1.1 Status of Meter Installation]: *"Three parties are unknown status and assumed to be pumbers. In WY 2024, Watermaster staff and legal counsel will continue to seek means to contact these Pumbers which is good to hear. However, it appears that this item has had some challenges that might warrant additional focus to bring about different ideas to break through to connect with the owners. Perhaps BWD and/or community members could help. If helpful and needed to collaborate on potential solutions, West Yost could prepare a proposed specific approach to WM Board for discussion."*
  - **Response:** Comment noted. Alternative approaches may be necessary and beneficial in regard to getting in contact with these Parties. A discussion on the three Parties of unknown status arose during the November 9, 2023 Board meeting, specifically in regards to their outstanding invoices. At the time, Watermaster Staff expressed that the outreach efforts to make contact with these Parties is more expensive than the amount owed and Staff had not initiated other approaches to make contact and/or obtain payment.
- 3) Comment – [Section 3.1.2.2 Groundwater Monitoring Network as of WY 2023]: *"Refers to regaining access to the Fortiner well. Minor edit, change to "Fortiner#1" in two places where it is mentioned."*
  - **Response:** Table 8, Figure 12-C, Appendix F-4 and Appendix G-4, G-11, G-26, G-41, G-56, and G-71 were revised to refer to the "Fortiner" well instead of the "Fortiner #1" well for consistency with the text in the Annual Report.
- 4) Comment – [Section 3.2.3 Reporting Period Meetings and Recommendations]: *"Minor edit, the TAC reviewed and made recommendations (did not prepare a scope of work and budget). The TAC reviewed and made recommendations for prepared a revised scope of work and budget (prepared by West Yost) for seven potential tasks to perform and to support the redetermination of the Sustainable Yield, based on the results of the BVHM extension."*
  - **Response:** The text in Section 3.2.3 was revised to read "The TAC reviewed and made recommendations for a revised scope of work and budget (prepared by West Yost) for seven potential tasks to perform and support the redetermination of the Sustainable Yield, based on the results of the BVHM extension."

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- 5) **Comment – [3.4 Redetermination of the Sustainable Yield]:** “Similar to last comment, please change this sentence to reflect that West prepared the scope and the TAC reviewed and made recommendations.”
  - **Response:** The text in Section 3.4 was revised to state that the TAC reviewed and recommended a revised scope of work to Redetermine the Sustainable Yield, which was ultimately approved by the Board.
- 6) **Comment – [Section 4.1.1 Judgment Terms for Water Rights Accounting]:** “Minor edit, the cumulative rampdown rate should read WYs 2021 through 2023.”
  - **Response:** The text in Section 4.1.1 was revised to read “The cumulative Rampdown Rate for WYs 2021 through 2023 is 15 percent.”
- 7) **Comment –** “County staff has reviewed Trey Driscoll’s comments from Intera and agree that the annual report could benefit from additional details concerning the reduction in pumping within the basin resulting from fallowing. It is important to dispel any misconceptions and clarify that the reported reductions in groundwater use are not attributed to inaccuracies in the methodology used to estimate water demand.”
  - **Response:** See response to Comment No. (13) from Trey Driscoll above.
- 8) **Comment -** “Given recent concerns raised by DWR, it is advisable to enhance the discussion on carryover in the report. Specifically, emphasize how the Watermaster can achieve sustainable yield by 2040 within the existing carryover provisions. If there are any issues with the carryover provisions that you believe would be detrimental to achieving sustainable yield by 2040, it is recommended for West Yost to bring those concerns into the 5-year update process of the GMP.”
  - **Response:** Section III.B of the Judgment requires the TAC to re-evaluate Carryover provisions for unused Annual Allocations of pumping rights by January 1, 2025. The TAC will perform this review as part of the scope of work to redetermine the Sustainable Yield. It is beyond the scope of the Annual Report to assess the performance of Carryover prior to the completion of the redetermination. At this time, the Annual Report is best suited to demonstrate that water rights are being properly implemented and accounted for in accordance with the Judgment (as is done in Section 4). As suggested, there may also be a place for discussing Carryover as part of the 5-year assessment of the GMP.
- 9) **Comment – [Section 5.5.1.2 Comparison to Sustainable Management Criteria]:** “Figure 12d, 12f, and any other applicable figures: For the well hydrographs with pressure transducer data, it is recommended to only plot the readings which approximate static groundwater level conditions. Or to use colors to differentiate between static and pumping water levels to not draw any confusion that wells have dropped below prescribed minimum thresholds (Figure 12d, 12f).”
  - **Response:** This a useful recommendation that will be considered to improve these figures in the future. Although the figures were not revised at this time due to time and budget constraints, a footnote was added to Section 5.5.1.2 to help explain the static groundwater levels and groundwater levels influenced by pumping presented in the figures.

## Appendix H

### Response to Comments on the Draft Water Year 2023 Annual Report

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#### Written Comments from Tom Watson (Aquilologic) on behalf of Rams Hill – Received February 23, 2024

- 1) **Comment** – *“I just wanted to echo some of Trey’s comments regarding the Annual Report. It is important that the Basin take “credit” where it can for the progress we have made toward sustainability. We have a good story to tell. Recommend we not bury the lead by relegating this narrative to some interior technical section of the report, but instead highlight those achievements up front in the executive summary (and/or Introduction) and as appropriate elsewhere in the report.”*
  - **Response:** Text in the Executive Summary has been updated as suggested to highlight key successes.