



# Annual Surveillance Report January 2025 to December 2025 for Syphon Canyon Dam DSOD Dam No. 1029-004

Unincorporated Orange County, California



Submitted to:  
Irvine Ranch Water District  
Dams & Storage  
15600 Sand Canyon Avenue  
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April 27, 2026  
GEI Project No. 2305575



Consulting April 27, 2026  
Engineers and GEI Project No. 2305575

Scientists Mr. Jacob Moeder,  
Engineering Manager – Dams & Storage  
Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92618

**Re: Syphon Canyon Dam, DSOD Dam No. 1029-004,  
Annual Surveillance Report from January 2025 to December 2025**

Dear Mr. Moeder:

GEI Consultants, Inc. (GEI) is pleased to submit this Annual Surveillance Report for Syphon Canyon Dam covering January 2025 to December 2025. This report is part of the scope of work described under our Professional Service Agreement between Irvine Ranch Water District (District) and GEI Consultants Inc. (GEI) dated October 25, 2023.

We appreciate this opportunity to provide the District with our services. Please contact Nichole Tollefson at [ntollefson@geiconsultants.com](mailto:ntollefson@geiconsultants.com) or Rich Sanchez at [rsanchez@geiconsultants.com](mailto:rsanchez@geiconsultants.com) with any questions.

Sincerely,

**GEI CONSULTANTS, INC.**



Richard Sanchez, P.E.  
Principal Engineer



Nichole Tollefson, P.M.P.  
Senior Engineer

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Appendix A Inspection Photograph Log of Syphon Canyon Dam June 16, 2025

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## **Acronyms and Abbreviations**

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AC	asphalt concrete
AF	acre-feet
CML&C	cement-mortar-lined and coated
District	Irvine Ranch Water District
DSOD	State of California, Department of Water Resources, Division of Safety of Dams
El, EL, Elev	elevation
ft	feet
GEI	GEI Consultants, Inc.
gpm	gallons per minute
gal/min	gallons per minute
H:V	Horizontal to Vertical
ID	identification
in.	inches
liter/min	liters per min
MW	monitoring well
NAVD 88	North American Vertical Datum of 1988
NGVD 29	National Geodetic Vertical Datum of 1929
No.	number
NOAA	National Oceanic and Atmospheric Administration
P.E.	Professional Engineer
P or Piez	Piezometer
RCP	reinforced concrete pipe
Res.	Reservoir
VW, VWP, VBW	Vibrating Wire Piezometer
W.S.	water surface
YR	year

## 1.0 Introduction and Background

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### 1.1 General

This report presents the results of the dam safety monitoring and surveillance for Syphon Canyon Dam conducted by the Irvine Ranch Water District (District) and GEI Consultants, Inc. (GEI) between January 2025 through December 2025. It includes a review of previous surveillance reports and a compilation of field measurements, maintenance reports, observations, and conclusions related to the general condition and safety of the dam. In addition, recommendations are provided for continued operation, surveillance, and monitoring of the dam. This report is submitted as part of the jurisdictional requirements of the State of California, Department of Water Resources, Division of Safety of Dams (DSOD).

This report includes graphical and tabulated summaries of the field measurements of water levels in the piezometers, seepage flow rates from the subdrains, and reservoir water levels. It includes two-year graphical summaries (short term) as well as historical (long term) graphical and tabular summaries of this data. The historical data is used to evaluate the long-term performance of the dam and reservoir and to identify any adverse trends. Water levels in the piezometers and seepage flow rates are presented with corresponding reservoir water surface elevations. Table 3 provides historical readings of each piezometer and seepage flow measuring point.

Figure 1 is a plan view of the dam, reservoir, and instrumentation locations. Figure 1A is a section of the dam along the maximum section showing piezometers along this plane. As used in this report, the left and right designations are viewed looking downstream.

The vertical datum indicated on the as-built plans and project documents for Syphon Canyon Dam is National Geodetic Vertical Datum of 1929 (NGVD 29). The reservoir water surface elevation and instrumentation data are currently being read based on NGVD 29.

In July 2023, IRWD developed a Dam Safety Program (IRWD, 2023) that includes principles and guidelines for Risk Informed Decision Making (RIDM) for its portfolio of dams. This report has been updated to follow the guidelines in the Dam Safety Program.

### 1.2 Dam and Reservoir

Syphon Canyon Dam and Reservoir are located in Orange County, California, and were constructed in 1949 by the Irvine Company. Irvine Ranch Water District (District) took over operation and ownership of the dam and reservoir in January of 2010. Currently, the District has plans to replace the dam.

Syphon Canyon Dam is a 59-foot-high homogeneous embankment dam. As Built plans show the dam crest is at Elevation of 385 ft, with a crest length of 843 ft and a crest width of 10 ft. The downstream face of the dam has a slope of 1.2H:1V (Horizontal:Vertical) from the crest to Elevation 378 ft, 1.4H:1V between Elevations 378 and 370 ft, and then a slope of 6H:1V to the downstream toe of the embankment. The upstream face has a uniform slope of 2.25H:1V with a bench at Elevation 378 ft. The upstream face is covered by low height grass cover and riprap, the downstream face is covered by well-maintained low-height grass cover and the crest is surfaced with soil and gravel.

The watershed contributing to the reservoir has a drainage area of only 0.3 square miles. The reservoir area is 27 acres, and the reservoir storage capacity is 578 acre-feet at the spillway crest elevation.

The reservoir has been drained in preparation of the upcoming dam replacement project. The dam will be rebuilt to current dam safety standards and the reservoir will not be filled again until after the construction of the new dam.

### **1.3 Spillway**

The spillway is located within the left abutment of the dam and consists of an approach apron and a broad-crested weir leading to a 12.5-foot-wide open trapezoidal channel and chute. The weir control section and sides of the spillway channel and chute are lined with shotcrete/gunite. Concrete was also placed to form the control section. The spillway crest is at Elevation 378.0 ft, providing 7 ft of total freeboard.

### **1.4 Outlet Works**

The outlet conduit consists of a 15-inch-diameter reinforced concrete pipe (RCP) with upstream and downstream control valves. The outlet is located at the right end of the dam and the manual operating equipment for the upstream control valve is located near the top of the dam. In 2015, the 15-inch slide gate at the inlet was replaced with a 12-inch-diameter valve. The invert of the inlet is at approximately Elevation 336.0 ft.

At the downstream side of the dam, the 15-inch-diameter RCP transitions to a 16-inch-diameter metal pipe with a 16-inch butterfly valve controlling the flow in the pipe. The 16-inch metal pipe then joins a 16-inch-diameter, cement-mortar-lined and-coated (CML&C) steel pipe that connects to the Interim Facility, which includes the reservoir drain line. The Interim Facility consists of a strainer facility which is used prior to serving recycled water to customers. An emergency blowoff pipe branches off the 16-inch steel pipe and discharges into the underground storm drain water system.

The District provided a Dam Outlet Valve Exercising Log which states the valves were exercised on February 25, 2025. The table is provided in Appendix B of this report.

## **1.5 Subdrains**

The dam embankment is homogeneous and there was no internal drainage system installed during the original construction of the dam. However, seepage through the dam and/or foundation is collected at the toe area and directed to the seepage collection vault located beyond the downstream toe of the dam (Figure 1). The seepage collection vault has just one seepage subdrain outlet.

## 2.0 Field Measurements

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### 2.1 General

Based on data provided by the District, field measurements at Syphon Canyon Dam have been taken on a regular basis since March 25, 2008. These measurements include the water levels in 12 piezometers and seepage readings starting in 2009. District personnel measure the water levels in the reservoir, piezometers, and the seepage flow monthly. Precipitation is measured by an onsite rain gage. There are no monitored survey monuments at this dam.

A Site and Instrumentation Plan showing the layout of the dam and appurtenances, as well as the locations of the piezometers and the seepage collection subdrain is shown in Figure 1. Figure 1A shows the piezometer locations along the maximum section of the dam.

Throughout this report, instrumentation measurements and readings that remained within historical limits and followed historical trends will be classified as normal. Historical limit is classified as the range between maximum and minimum water levels within the past ten years.

Threshold and action levels were not developed for Syphon Canyon dam. IRWD excluded Syphon Canyon Dam from threshold and action level analysis since the reservoir is drained and is planned to be drained until the new dam is built.

Based on the ten-year historical data from January 2015 through December 2025, the reservoir water surface elevation varied from dry to a maximum Elevation of 375.9 ft. During the 2025 review period, the reservoir was mostly drained, and the water surface elevation throughout the review period was at 343.0 ft. The District started draining the reservoir in April 2022 in preparation for the Syphon Canyon Dam Improvements Project. Rainfall data is included in Table 3 and Figures 2 through 11.

### 2.2 Piezometers

Originally, the dam had 12 open-well piezometers. An open-well piezometer is a small-diameter well used mainly to measure the water pressure or depth to water. It is typically installed in a casing inside a vertical borehole and has a discrete perforated zone near its bottom to enable monitoring of changes in water levels within that zone. More than one piezometer can be installed within a single, larger-diameter outer well casing. These groups of piezometers are often referred to as multi-stage or nested piezometers.

In December 2015, the District converted eight open-well piezometers to vibrating wire piezometers: Piezometers VBW/2-A, VBW/2-B, VBW/4, VBW/5, VBW/6, VBW/7, VBW/8, and VBW/9. Vibrating wire piezometers contain a high tensile steel wire attached at one end to a diaphragm. The frequency of vibration in the wire induces an alternating electrical current in a coil. The magnitude of the current is detected, and the reading is then converted to pressure. The pressure fluctuates with changes in water levels in the immediate vicinity of the piezometer tip. Between May 2020 and November 2020, the District was having problems with the vibrating wire piezometer data logger and did not provide readings, as can be seen in Table 3. The District was able to fix the data logger unit with the help of the manufacturer (Geokon) and started providing readings again in 2021. The readings seem to follow the historical trends seen before the data logger malfunction. The exception includes vibrating wire piezometers VBW/2A and 2B, which appear to be providing erroneous readings, which is attributed to incorrect data logger conversion settings. These piezometers, as well as VBW/4, were removed and placed in a bucket during the review 2024 period. In 2025 VBW/4 was replaced and has been providing readings within historical limits.

The location of each piezometer is shown in Figure 1. Table 3 lists piezometer water levels from March 2008 through December 2025. Figures 2 through 5 are graphical plots of piezometer water levels and reservoir water surface elevations during the two-year period from January 2024 through December 2025. Figures 6 through 9 are graphical plots of the historical piezometer water levels and reservoir water surface elevations since 2015.

The following is a discussion of each piezometer including the water level measurements during the 12-month review period as well as comparisons with historical trends.

Table 1 provides the maximum and minimum water levels recorded during the current review period, as well as the historical range for each piezometer. Readings with isolated spikes or drops were not considered reliable (erroneous reading) and were not included in the maximum and minimum water level range.

**Table 1. Piezometers – Maximum and Minimum Water Level Ranges**

Piezometer	Tip Elevation (ft)	2015-2025 10-Year Range (ft)	2025 Range (ft)	Comment
P-1A	365.7	364.5 - 366	365.4 - 365.8	Dry
P-1B	345.7	345.3 - 357.5	345.3 - 346.4	Mostly dry
VBW/2-A	342.2	342.9 - 359.0	343.2 - 343.5	
VBW/2-B	309.4	321.4 - 384.0	356.9 - 357.4	
P-3A	362.3	357.9 - 362.3	362.0 - 362.3	Dry
P-3B	340.3	339.6 - 357.4	339.9 - 340.2	Dry
VBW/4	314.7	317.0 - 331.9	322.8 - 325.7	
VBW/5	314.0	311.5 - 332.6	314.0 - 314.0	Dry
VBW/6	360.6	359.3 - 361.4	359.3 - 359.3	Dry
VBW/7	338.1	338.1 - 340.3	338.1 - 338.1	Dry
VBW/8	336.8	336.8 - 338.9	336.8 - 336.8	Dry
VBW/9	335.4	333.9 - 336.3	333.9 - 333.9	Dry

Piezometer P-1A is nested in the same well as Piezometer P-1B at the right end of the crest of the dam. The tip of P-1A is located within the dam embankment at Elevation 365.7 ft, while the tip of P-1B is within the dam foundation at Elevation 345.7 ft. Piezometer P-1A and P-1B remained dry during the report period (Figures 2 and 6).

Piezometer VBW/2-A is nested in the same well as Piezometer VBW/2-B on the crest of the dam, near the maximum section of the dam. The tip of VBW/2-A is located within the dam embankment at Elevation 342.2 ft, while the tip of VBW/2-B is within the dam foundation at Elevation 304 ft. The water level readings in Piezometer VBW/2-B have been periodically unreliable (erroneous) since the vibrating wire instrument was installed in December 2015 (Figure 7). In 2016, the District determined that the vibrating wire instrument was providing faulty data, which resulted in readings higher than the historic trend. The instrument was repaired, and on February 16, 2017, the District cleaned the piezometer VBW/2-B standpipe which resulted in the new reported bottom Elevation of 304.0 ft, which is five feet deeper than prior to the cleaning. From January 2018 through November 2019, January 2020 through March 2020, and on December 2020, the water levels in Piezometer VBW/2-B appeared to respond normally to the fluctuations in the reservoir levels (Table 3 and Figure 7). VBW/2-B data included in Table 3 for December 2019 and April 2020 is not considered reliable and attributed to the data logger problems. No data was available from May 2020 to November 2020 for VBW/2-A and VBW/2-B due to problems with the data logger.

According to the instrumentation data provided by IRWD, the vibrating wires for VBW/2-A and 2-B were pulled and placed in buckets during the review period (Figure 3). GEI did not use the readings from VBW/2-A and 2-B for the evaluation of the dam since they are not reliable. The vibrating wire piezometers' data logger instrument is still providing erratic readings at times based on discussions with the District.

Open-well piezometer P-3A is nested in the same well as piezometer P-3B at the far-left portion of the crest of the dam. The tips of both P-3A and P-3B are located within the dam embankment at Elevations 362.3 and 340.3 ft, respectively. P-3A and P-3B remained dry throughout the review period (Figures 4 and 8).

Piezometer VBW/4 is located on the downstream face, near the maximum section of the dam. VBW/5 is located at the downstream toe, also near the maximum section of the dam. The tips of both VBW/4 and VBW/5 are located within the dam foundation at Elevations 314.7 and 314.0 ft, respectively. According to the instrumentation data provided by IRWD, the vibrating wire instrument for VBW/4 was pulled and placed in a bucket during 2024 and was replaced in November 2024 (Figure 5). VBW/5 became dry in August 2024 and has remained dry in response to the dry reservoir.

Piezometers VBW/6, VBW/7, and VBW/8 are located on the downstream face of the dam, near the maximum section. The tips of all three piezometers are located within the dam embankment

at Elevations 360.6, 338.1, and 336.8 ft, respectively. On June 23, 2015, the tops of casings for all three piezometers were raised between 1.1 feet to 1.6 feet (Table 2). In July 2015, the District cleaned Piezometer VBW/7. Since VBW/6, VBW/7, and VBW/8 were installed in 2015, water level readings have not responded to the reservoir water level and the piezometer water levels have been near the bottom of piezometer tip elevations (Figure 9). During the review period VBW/6, VBW/7, and VBW/8 were dry (Figures 3 and 5).

Piezometer VBW/9 is located on the downstream face of the dam near the right side. The tip of VBW/9 is located within the dam foundation at Elevation 335.4 ft. On June 23, 2015, the top of the casing for VBW/9 was raised by 1.5 feet (Table 2). VBW/9 was dry during the 2025 review period (Figure 2). Since the vibrating wire instrument was installed in December 2015 for VBW/9, the level readings have not fluctuated and it is considered dry (Figure 6). Based on GEI's review of the available piezometer data, most of the piezometers were dry or showing piezometer water levels trending downwards due to the recent lowering of the reservoir level.

## 2.3 Seepage Flows

Seepage through the dam and/or foundation is collected in the seepage collection vault, which is located beyond the downstream toe of the dam (Figure 1). The seepage collection vault has one seepage subdrain outlet. Seepage flow is measured monthly by District personnel at that one point.

Historical seepage flow rates measured at the sole seepage flow point are presented in Table 3 and shown in Figure 11. Figure 10 displays the seepage flow rates versus the reservoir water levels from January 2024 through December 2025. From January 2020 to March 2020 seepage flow was zero. The range of minimum and maximum flow rate for seepage based on trends from the ten-year historical data from January 2015 through December 2025 was between 0 and 9.5 gallons per minute (gpm). No seepage has been observed since June 29, 2022 because the reservoir has been fully drained.

## 3.0 Field Evaluations

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### 3.1 Field Evaluation of June 16, 2025

A field evaluation and inspection were performed by Emerson Revolorio, Santiago Martinez-Granata, and Adam Snyder of GEI, and Christian Wimenta, Anthony Zaragoza, Nick Pizanie, and Steve Habiger of the District on June 16, 2025. The reservoir was dry during the inspection. Weather conditions were sunny with temperature in the mid-80s. Photos taken by GEI are included in the Appendix of this report.

#### 3.1.1 Dam

The crest of the dam, downstream slope and groin areas, abutment areas and sections of the upstream slope face were visually inspected, and no adverse signs of movement, significant cracking, or instability were seen, see Photos 1-6. The reservoir has been drained in preparation of the upcoming dam replacement project. The dam will be rebuilt to current dam safety standards and the reservoir will not be filled again until after the construction of the new dam. However, there are sporadic times throughout the year when ponded water exists within the reservoir due to precipitation and runoff. The ponded water tends to dry out quickly and was dry during the inspection. The exposed upstream riprap with a grass cover slope face had no unusual conditions. No other unusual items were observed. The gravel/dirt crest surface was walked for its entire length, and no signs of movement/settlement, cracking, or instability were seen. The downstream embankment slope looked well maintained. No rodent activity was seen during this inspection. Currently, IRWD is utilizing carbon monoxide as an effective treatment for ground squirrel control. IRWD still has black feeder control stations for rats and mice near the dam caretaker houses and other IRWD facilities. No signs of seepage or unusual wet spots were seen on the downstream slope face or toe area of the dam. The condition of the dam remains largely unchanged from the conditions observed during the March 2024 inspection. Overall, the dam was well maintained with no signs of instability, or distress.

#### 3.1.2 Spillway

The spillway is ungated and consists of a trapezoidal shaped open channel on the left abutment. The spillway was clear of any obstructions. The channel sides and bottom are covered with shotcrete/gunite and concrete. The gunite and concrete are deteriorating in some areas and has significant cracking, see Photos 7 and 8. The District is moving forward with design work for the construction of a new dam and spillway. Therefore, repairing the existing spillway has not been initiated considering a major replacement would occur in soon, the watershed drainage area is relatively small, and the reservoir is typically drained.

### **3.1.3 Outlet Works**

The outlet works includes an upstream 12-inch control valve that is manually operated (hand wheel) from near the top of the dam. The outlet works are located at the right end of the dam, see Photo 4. The upstream outlet valve is at Elevation 336 ft. The upstream valve was not exercised during this inspection. The downstream 16-inch control outlet valves are just beyond the right downstream toe area of the dam. Any emergency evacuation flows from this outlet system would go into local storm drain system below the dam.

### **3.1.4 Seepage**

No seepage or wet spots were observed on the dam. Monitored seepage flow continues to be measured monthly by District staff. The seepage toe drain vault was examined and found dry, see Photo 9.

## 4.0 Conclusions and Recommendations

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### 4.1 Conclusions

- 1) The dam is being rebuilt and enlarged to increase water storage. The reservoir was dry during the inspection.
- 2) Based on the review of available instrumentation data and the field inspection observations, the dam did not have signs of structural deficiencies or signs of seepage.
- 3) Most of the piezometers were dry or showing piezometer water levels trending downward due to the draining of the reservoir.
- 4) Seepage flow has not been observed since June 2022 because the reservoir has been drained.
- 5) No rodent activity was observed on the downstream face of the dam during this inspection. IRWD is continuing with rodent control measures. IRWD is currently utilizing carbon monoxide as an effective treatment for ground squirrel control. IRWD still has black feeder control stations for rats and mice near the dam caretaker houses and other IRWD facilities.
- 6) The spillway gunite lining cracks and spall areas appeared to be unchanged from the last inspection. Needed spillway repairs are not planned due to major dam modifications and spillway replacement which are currently underway and scheduled to start at the end of 2025.
- 7) Based on District records, the outlet valves were exercised during in February 2025.

## 4.2 Recommendations

- 1) The District should continue collaborating with pest management companies to determine most effective treatment options in controlling rodent activity. In addition, the District should continue collapsing, backfilling, and compacting rodent holes with surrounding material as an ongoing maintenance item throughout the dam.
- 2) Operational staff to observe the condition of the dam and appurtenant structures and look for signs of distress or movement, increased seepage, or other unusual conditions during their regular inspections. Any unusual observations should be reported immediately to Dam Safety Engineer for evaluation.
- 3) GEI recommends following IRWD’s 2026 Dam Safety Program Guideline No. 3 (Seismic Monitoring) post-earthquake.
- 4) Due to the construction of the new Syphon Dam including spillway and outlet facilities now scheduled to begin in 2026; GEI recommends discontinuing annual dam safety performance inspections and reporting until the new dam construction has been completed. Nearing completion of the new dam and facilities, it is recommended a reservoir filling plan and instrumentation monitoring program be developed for IRWD’s review and approval. Performance dam safety inspections and monitoring to resume upon completion of the new dam. This would include baseline measurements of all instrumentation including new survey monuments, piezometers, seepage drains, and reservoir level readings prior, during, and after filling the reservoir.

**Syphon Canyon Dam Action Item Summary**

Item	Location	Maintenance	Measures
Rodent control feeder boxes	Throughout dam	Lack of poison in rodent control feeder boxes	Rodent control measures shall resume once new dam and associated facilities are constructed.

## 5.0 Limitations

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This report was prepared exclusively for the use of Irvine Ranch Water District. The findings and conclusions, if any provided by GEI in this report, are based solely on the information reported to GEI as of the date of this report. Future investigations or additional information not provided to GEI at the time of this report may result in modification of this report. GEI's scope of work did not include verifying the completeness or accuracy of information provided by others. Accordingly, GEI shall not be liable for any damages, costs, or other consequences resulting from reliance on such information if it is later determined to be inaccurate or incomplete. GEI's professional services for this project have been performed in a manner consistent with that degree of skill and care ordinarily exercised by members of the same profession currently practicing in the same locality, performing similar services under similar conditions. GEI makes no other representations and no warranties, express or implied.

This report presents observations made, conclusions drawn, and opinions formed from (1) a visual inspection of the Syphon Canyon Dam and its appurtenant structures, and (2) a review of instrumentation data, including piezometer levels and seepage, collected by the District. The purpose of the inspection and review is to assess the safety of the structure for continuing operation. Reuse of this report for any other purposes, in part or in whole, is at the sole risk of the user.

In the context intended above, the term "safety" is interpreted to be restricted specifically to major structural and control features of the project in regard to their adequacy against possible catastrophic failure due to natural or operational events. No consideration is given herein to those public safety aspects related to voluntary occupancy or use of project features in such manner as to result in personal mishaps.

The undersigned who performed the inspection and reviewed the instrumentation data and prepared this report, desire that it be clearly understood that the conclusions regarding the condition and safety of the dam and related facilities are not guaranteed but do represent our best judgment. Inevitably, such judgment must be recognized to be affected to an uncertain degree by the practical limitations that affect all dam evaluations, relative principally to approximate knowledge of the existing properties of the structures and their foundations, the potential for storm or seismic damage, and the uncertainties that are known to exist in estimating margins of safety.

## 6.0 References

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DSOD (California Department of Water Resources, Division of Safety of Dams), Syphon Canyon Dam (No. 1029-004) Inspection of Dam and Reservoir in Certified Status report, October 20, 2020.

Genterra, 2018, Annual Surveillance Report January 2017 through December 2017 Syphon Canyon Dam DSOD Dam No. 1029-004, Irvine, CA, by Genterra Consultants Inc., December 19, 2018.

IRWD, 2023, Dam Safety Program Guidelines & Governance, July 2023.

## Tables

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**TABLE 2  
SYPHON CANYON DAM  
PIEZOMETER DETAILS**

Piezometer ID	Location and Approximate Station	Original			Modified Unknown Date			2015 - Current			Material at Tip (if known)	Installation or First Reading
		Top Elev. (ft)	Tip Elev. (ft)	Depth (ft)	Top Elev. (ft)	Tip Elev. (ft)	Depth (ft)	Top Elev. (ft)	Tip Elev. (ft)	Depth (ft)		
P-1A	Dam Crest, Station 6+90	385.1	365.7	19.4	385.1	365.7	19.4	385.1	365.7	19.4	Dam Embankment	Before 2003
P-1B	Dam Crest, Station 6+90	385.1	345.7	39.4	385.1	345.7	39.4	385.1	345.7	39.4	Dam Foundation	Before 2003
VBW/2-A	Dam Crest, Station 4+90	385.9	342.2	43.7	385.9	342.2	43.7	385.9	342.2	43.7	Dam Embankment	Before 2003
VBW/2-B	Dam Crest, Station 4+90	385.0	309.4	75.6	385.0	309.4	75.6	385.0	304.0	81.0	Dam Foundation	Before 2003
P-3A	Dam Crest, Station 3+00	385.6	362.3	23.3	385.6	362.3	23.3	385.6	362.3	23.3	Dam Embankment	Before 2003
P-3B	Dam Crest, Station 3+00	385.6	340.3	45.3	385.6	340.3	45.3	385.6	340.3	45.3	Dam Foundation	Before 2003
VBW/4	Downstream Slope, Station 5+00	340.0	314.7	25.3	340.0	314.7	25.3	342.8	314.7	28.1	Dam Embankment	Before 2003
VBW/5	Downstream Slope, Station 4+60	330.7	314.0	16.7	330.7	314.0	16.7	333.7	314.0	19.7	Dam Foundation	Before 2003
VBW/6	Downstream Slope, Station 4+90	370.2	360.6	9.6	370.2	360.6	9.6	371.4	360.6	10.8	Dam Embankment	1/19/2011
VBW/7	Downstream Slope, Station 4+90	349.7	338.1	11.6	349.7	338.1	11.6	351.3	338.1	13.2	Dam Foundation	1/19/2011
VBW/8	Downstream Slope, Station 4+90	343.4	336.8	6.6	345.3	336.8	8.5	346.4	336.8	9.6	Dam Embankment	1/19/2011
VBW/9	Downstream Slope, Station 6+70	342.9	335.4	7.5	344.9	335.4	9.5	346.4	335.4	11.0	Dam Foundation	1/19/2011

1. Piezometer data based on NGVD 29 datum.

**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			P-1A			P-1B			VBW/2-A			VBW/2-B		
Top of Well Elevation -->			385.10			385.10			385.90			385.00		
Bottom of Well Elevation -->			365.70			345.70			342.20			309.40	304	Maint. 2/16/2017
Depth of Well			19.40			39.40			43.70			75.60	81	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/1/2008														
2/1/2008														
3/25/2008	365.10		19.40	365.7	Dry	32.40	352.7		27.70	358.2		45.60	339.4	
4/25/2008	366.40		19.40	365.7	Dry	32.40	352.7		27.70	358.2		45.60	339.4	
5/28/2008	365.30		19.40	365.7	Dry	32.40	352.7		27.70	358.2		46.60	338.4	
6/25/2008	365.00		19.40	365.7	Dry	32.40	352.7		28.20	357.7		46.60	338.4	
7/18/2008	364.50		19.40	365.7	Dry	32.40	352.7		28.80	357.1		46.60	338.4	
8/25/2008	363.50		19.40	365.7	Dry	32.80	352.3		28.80	357.1		46.60	338.4	
9/25/2008	363.00		19.40	365.7	Dry	32.80	352.3		28.80	357.1		46.60	338.4	
10/21/2008	362.00		19.40	365.7	Dry	33.40	351.7		28.20	357.7		47.00	338.0	
11/25/2008	365.00		19.40	365.7	Dry	33.90	351.2		28.20	357.7		46.10	338.9	
12/23/2008	365.00		19.40	365.7	Dry	33.90	351.2		28.20	357.7		46.10	338.9	
1/26/2009	364.50		19.40	365.7		33.40	351.7		28.70	357.2		46.60	338.4	
2/24/2009	364.50		19.40	365.7		33.40	351.7		28.70	357.2		46.60	338.4	
3/23/2009	368.50		19.40	365.7		30.80	354.3		28.70	357.2		44.60	340.4	
4/27/2009	367.50		19.40	365.7		30.80	354.3		28.70	357.2		45.00	340.0	
5/22/2009	367.00		19.40	365.7		31.40	353.7		28.70	357.2		45.00	340.0	
6/29/2009	372.00		19.40	365.7		26.80	358.3		27.70	358.2		43.00	342.0	
7/31/2009	371.00		19.40	365.7		28.80	356.3		28.70	357.2		45.00	340.0	
8/26/2009	370.00		19.40	365.7		29.40	355.7		28.70	357.2		45.60	339.4	
9/29/2009	369.50		19.40	365.7		29.80	355.3		28.70	357.2		46.00	339.0	
10/30/2009	369.00		19.40	365.7		29.40	355.7		27.70	358.2		45.00	340.0	
11/30/2009	368.00		19.40	365.7		29.40	355.7		27.10	358.8		45.00	340.0	
12/30/2009	368.00		19.40	365.7		29.40	355.7		27.10	358.8		45.00	340.0	
3/1/2010	368.00		19.90	365.2	Dry	28.20	356.9		26.30	359.6		44.00	341.0	
3/30/2010	368.00		19.90	365.2	Dry	28.50	356.6		26.20	359.7		44.20	340.8	
4/4/2010	368.70		19.80	365.3	Dry	28.50	356.6		26.10	359.8		44.30	340.7	
4/27/2010	368.40		19.70	365.4		28.80	356.6		26.00	359.9		44.20	340.8	
5/26/2010	367.84		19.90	365.2	Dry	29.10	356.3		26.10	359.8		44.60	340.4	
6/29/2010	367.00		19.60	365.5	Dry	29.50	355.6		26.20	359.7		44.80	340.2	
7/27/2010	367.00		19.80	365.3	Dry	29.90	355.2		26.40	359.5		45.10	339.9	
8/27/2010	366.80		19.60	365.3	Dry	30.30	354.8		26.60	359.3		45.40	339.6	
9/28/2010	366.80		19.70	365.5	Dry	30.70	354.4		26.60	359.3		45.60	339.4	
10/26/2010	368.50		19.70	365.4	Dry	31.00	354.1		27.00	358.9		45.80	339.2	
11/30/2010	371.40		19.60	365.4		29.50	355.6		27.20	358.7		44.70	340.3	
12/28/2010	374.70		19.70	365.5	Dry	27.20	357.9		27.20	358.7		43.10	341.9	
1/4/2011	374.80		19.70	365.4	Dry	27.00	358.1		27.40	358.5		43.10	341.9	
1/6/2011	374.80		19.50	365.4	Dry	27.00	358.1		27.10	358.8		43.10	342.0	
1/7/2011	374.80		19.70	365.6	Dry	26.90	358.2		27.10	358.8		43.00	342.0	
1/8/2011	374.80		19.70	365.4	Dry	27.20	357.9		27.30	358.6		43.40	341.6	
1/9/2011	374.80		19.70	365.4	Dry	27.20	358.1		27.30	358.6		43.50	341.5	
1/10/2011	374.80		19.50	365.6	Dry	27.00	358.1		27.10	358.8		43.30	341.7	
1/11/2011	374.80		19.70	365.4	Dry	27.10	358.0		27.10	358.8		43.20	341.8	
1/17/2011	374.80		19.60	365.5	Dry	27.10	357.9		27.00	358.9		43.30	341.7	
1/19/2011	374.70		19.70	365.4	Dry	27.20	357.9		27.00	358.9		43.40	341.6	
1/21/2011	374.80		19.50	365.6	Dry	27.20	357.9		26.90	359.0		43.30	341.7	
1/27/2011	374.60		19.70	365.4	Dry	27.20	357.6		26.80	359.1		43.40	341.6	
2/3/2011	374.60		19.50	365.6	Dry	27.50	357.6		26.70	359.2		43.60	341.4	

Notes:  
1. Readings in red are classified as erroneous

**TABLE 3  
 SYPHON CANYON DAM  
 PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS  
 JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			P-1A			P-1B			VBW/2-A			VBW/2-B		
Top of Well Elevation -->			385.10			385.10			385.90			385.00		
Bottom of Well Elevation -->			365.70			345.70			342.20			309.40	304	Maint. 2/16/2017
Depth of Well			19.40			39.40			43.70			75.60	81	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
2/8/2011	374.70		19.50	365.6	Dry	27.50	357.6		26.70	359.2		43.60	341.4	
2/28/2011	374.70		19.70	365.4	Dry	28.00	357.1		26.20	359.7		43.80	341.2	
3/28/2011	372.50	2.35	19.60	365.5		28.90	356.2		26.20	359.7		44.20	340.8	
4/28/2011	372.10	0.27	19.80	365.3	Dry	28.80	356.3		24.20	361.7		44.60	340.4	
5/18/2011	371.80	0.03	19.70	365.4	Dry	29.40	355.7		26.40	359.5		44.40	340.6	
5/25/2011	371.70	0.30	19.70	365.4	Dry	29.40	355.7		26.40	359.5		44.30	340.7	
6/28/2011	370.90	0.03	19.70	365.4	Dry	29.70	355.4		26.50	359.4		44.50	340.5	
7/26/2011	370.30	0.03	19.70	365.4	Dry	30.20	354.9							
8/24/2011	369.60	0.03	19.60	365.5	Dry	30.60	354.5		26.80	359.1		44.80	340.2	
8/30/2011	369.40		19.90	365.2		30.90	354.2		27.10	358.8		45.00	340.0	
9/13/2011	364.30	0.00	19.80	365.3	Dry	33.60	351.5		27.20	358.7		47.10	337.9	
9/27/2011	361.90		19.70	365.4	Dry	36.50	348.6		27.20	358.7		49.60	335.4	
10/11/2011	358.50	1.03	19.60	365.5	Dry	39.60	345.5		27.30	358.6		51.90	333.1	
10/25/2011	356.00	1.03	19.70	365.4	Dry	39.60	345.5		27.70	358.2		53.20	331.8	
11/29/2011	355.00	1.51	19.70	365.4	Dry	39.60	345.5		26.30	359.6		54.20	330.8	
12/28/2011	355.00	0.28	19.80	365.3	Dry	39.70	345.5		28.80	357.1		54.80	330.3	
1/26/2012	355.00	1.05	19.70	365.4	Dry	39.50	345.6		29.00	356.9		54.90	330.1	
2/28/2012	355.00	0.73	19.70	365.4	Dry	39.50	345.6		29.30	356.6		55.20	329.8	
3/27/2012	352.40	0.73	19.90	365.2		39.80	345.3		29.80	356.1		55.30	329.7	
4/23/2012	352.10	1.35	19.70	365.4		39.60	345.5		29.80	356.1		55.20	329.8	
5/30/2012	352.20	0.07	19.70	365.4		39.70	345.4		30.00	355.9		55.60	329.4	
6/13/2012	352.20		19.60	365.4		39.60	345.5		30.20	355.7		55.40	329.3	
6/26/2012	352.20	0.00	19.70	365.4		39.50	345.6		30.30	355.6		56.00	329.0	
7/24/2012	352.20	0.23	19.60	365.5		39.60	345.5		30.50	355.4		53.40	331.6	
8/8/2012	352.20	0.23	19.80	365.3		39.80	345.3		30.50	355.4		53.60	331.4	
8/28/2012	351.80	0.00	19.60	365.5		39.50	345.6		30.60	355.3		54.50	330.5	
8/29/2012	351.80	0.00	19.80	365.3		39.70	345.4		30.80	355.1		54.80	330.2	
9/25/2012	351.30	0.00	19.60	365.5		39.50	345.6		30.90	355.0		55.10	329.9	
10/31/2012	351.00	0.09	19.60	365.5		39.50	345.6		30.90	355.0		55.90	329.1	
11/27/2012	351.00	0.87	19.60	365.5		39.50	345.6		31.20	354.7		56.30	328.7	
12/12/2012	351.00	1.13	19.70	365.4		39.60	345.5		31.20	354.7		56.30	328.7	
1/29/2013	366.10	1.30	19.80	365.3		39.90	345.2		31.20	354.7		46.30	338.7	
2/21/2013	372.10	0.42	19.80	365.3		35.80	349.3		32.70	353.2		43.90	341.1	
3/28/2013	371.90	0.79	19.70	365.4		32.90	352.2		31.50	354.4		42.20	342.8	
4/25/2013	371.40	0.00	19.60	365.5		33.00	352.1		31.40	354.5		42.20	342.8	
5/22/2013	370.90	0.00	19.80	365.3		32.90	352.2		31.40	354.5		42.70	342.3	
6/25/2013	370.20	0.00	19.70	365.4		33.20	351.9		30.70	355.2		42.80	342.2	
7/23/2013	369.40	0.00	19.70	365.4	Dry	33.60	351.5		30.50	355.4		43.20	341.8	
8/21/2013	368.60	0.00	19.70	365.4	Dry	34.10	351.0		30.40	355.5		43.80	341.3	
9/25/2013	367.70	0.00	19.70	365.4	Dry	34.60	350.5		30.20	355.7		44.10	340.9	
10/30/2013	366.90	0.00	19.70	365.4	Dry	35.30	349.8		30.30	355.6		44.80	340.2	
11/26/2013	366.50	0.59	19.70	365.4	Dry	35.60	349.5		30.30	355.6		45.10	339.9	
12/17/2013	366.20	0.70	19.70	365.4	Dry	35.80	349.3		30.40	355.5		45.50	339.5	
1/28/2014	365.50	0.00	19.70	365.4	Dry	36.10	349.0		30.60	355.3		45.90	339.1	
2/25/2014	365.40	0.76	19.80	365.3	Dry	36.60	348.6		30.80	355.1		46.20	338.9	
3/25/2014	365.30		19.80	365.3	Dry	36.40	348.7		30.80	355.1		45.90	339.1	
3/28/2014	365.30	2.02	19.70	365.4		36.50	348.6		30.70			45.90		
4/25/2014	364.50	0.52	19.70	365.4		36.60	348.5		30.80	355.1		46.10	338.9	

Notes:  
 1. Readings in red are classified as erroneous

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SYPHON CANYON DAM  
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS  
JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			P-1A			P-1B			VBW/2-A			VBW/2-B		
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Bottom of Well Elevation -->			365.70			345.70			342.20			309.40	304	Maint. 2/16/2017
Depth of Well			19.40			39.40			43.70			75.60	81	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
5/28/2014	363.80	0.00	19.80	365.3	Dry	37.10	348.0		30.90	355.0		46.50	338.5	
6/25/2014	363.00	0.00	19.70	365.2	Dry	37.70	351.5		31.20	358.7		47.00	337.9	
7/30/2014	361.90	0.00	19.70	365.2	Dry	38.00	348.6		31.10	358.7		47.20	335.4	
8/27/2014	361.10	0.04	19.70	365.4	Dry	38.60	346.5		31.30	354.6		47.90	337.1	
9/23/2014	360.50	0.00	19.50	365.6	Dry	39.10	346.0		31.30	354.6		48.30	336.7	
10/29/2014	359.50	0.00	19.80	365.3	Dry	39.70	345.4		31.80	354.1		49.00	336.0	
11/24/2014	359.40	0.32	19.70	365.4	Dry	39.60	345.5		31.60	354.3		49.40	335.6	
12/30/2014	359.40	3.98	19.70	365.4	Dry	39.70	345.4		31.80	354.1		49.90	335.1	
1/27/2015	359.00	1.42	19.70	365.4	Dry	39.80	345.3		32.10	353.8		49.80	335.2	
2/26/2015	358.60	0.46	19.70	365.4	Dry	39.60	345.5		31.80	354.1		50.10	334.9	
3/27/2015	358.00	0.63	19.70	365.4	Dry	39.50	345.6		32.30	353.6		51.30	333.8	
4/26/2015	331.00	0.22	19.80	365.3	Dry	39.60	345.5	Dry	32.10	353.8		56.50	328.5	
5/27/2015	332.00	1.79	19.80	365.3	Dry	39.60	345.5	Dry	32.20	353.7		56.30	328.7	
6/23/2015	331.00	0.00	19.70	365.4	Dry	39.80	345.3	Dry	32.30	353.6		60.40	324.6	
7/30/2015	331.00	0.00	19.70	365.4	Dry	39.60	345.5	Dry	31.10	354.8	In July maint. Cleaned	61.40	323.6	
8/25/2015	331.00	0.00	19.60	365.5	Dry	39.60	345.5	Dry	32.80	353.1	Dry	62.10	322.9	
9/30/2015	331.00	1.97	19.10	366.0	Dry	39.80	345.3	Dry	32.10	353.8		62.40	322.6	
10/29/2015	331.00	0.18	19.70	365.4	Dry	39.70	345.4	Dry	33.20	352.7		62.40	322.6	
11/25/2015	331.00	0.17	19.70	365.4	Dry	39.70	345.4	Dry	33.30	352.6		63.10	321.9	
12/30/2015	331.00	1.42	19.70	365.4	Dry	39.70	345.4	Dry	33.40	352.5	VW installed	63.60	321.4	VW installed
1/26/2016	343.70	2.97	19.60	365.5	Dry	39.60	345.5	Dry	32.30	353.6		46.10	338.9	
2/24/2016	363.80	0.26	20.60	364.5	Dry	39.60	345.5	Dry	32.50	353.5		31.40		Erroneous
3/29/2016	374.90	1.50	19.60	365.5	Dry	38.40	346.7		32.70	353.2		23.30		Erroneous
4/28/2016	375.50	0.09	19.70	365.4	Dry	32.40	352.7		32.60	353.3		23.90		Erroneous
5/24/2016	374.40	0.13	19.50	365.6	Dry	30.80	354.3		31.70	354.2		21.70		Erroneous
6/29/2016	373.70	0.00	19.50	365.6	Dry	30.80	354.3		30.60	355.3		21.60		Erroneous
7/28/2016	372.20	0.00	19.70	365.4	Dry	30.70	354.4		30.00	355.9		23.90		Erroneous
8/25/2016	367.10	0.00	19.70	365.4	Dry	32.20	352.9		29.50	356.4		26.10		Erroneous
9/27/2016	363.30	0.00	19.60	365.5	Dry	34.60	350.5		29.70	356.2		28.20		Erroneous
10/25/2016	362.10	0.82	19.60	365.5	Dry	35.90	349.2		29.50	356.4		28.50		Erroneous
11/22/2016	361.80	1.69	19.70	365.4	Dry	36.90	348.2				VW was not logging			VW was not logging
12/28/2016	368.55	3.61	19.70	365.4	Dry	36.90	348.2		30.00	355.9		25.00		Erroneous
1/25/2017	375.80	6.48	19.80	365.3	Dry	32.50	352.6		29.90	356.0		34.20	350.8	Measured w/sounder
2/28/2017	375.90	3.95	19.60	365.5	Dry	28.20	356.9		29.90	356.0		34.00	351.0	Measured w/sounder
3/15/2017	375.80	3.61	19.80	365.3	Dry	28.40	356.7		28.40	357.5		34.20	350.8	Measured w/sounder
3/28/2017	375.50	0.09	19.70	365.4	Dry	27.90	357.2		28.20	357.7		13.20		Erroneous
4/26/2017	375.00	0.04	19.80	365.3	Dry	27.60	357.5		27.60	358.3		34.00	351.0	Measured w/sounder
5/23/2017	374.60	0.00	19.70	365.4	Dry	28.00	357.1		27.20	358.7		8.30		Erroneous
6/22/2017	373.80	0.00	19.70	365.4	Dry	28.20	356.9		27.00	358.9		2.00		Erroneous
7/26/2017	371.40	0.00	19.70	365.4	Dry	29.70	355.4		26.90	359.0		4.10		Erroneous
8/30/2017	368.60	0.00	19.70	365.4	Dry	31.10	354.0		27.20	358.7		6.00		Erroneous
9/28/2017	364.80	0.00	19.60	365.5	Dry	33.20	351.9		27.20	358.7		8.10		Erroneous
10/26/2017	359.00	0.00	19.70	365.4	Dry	34.40	350.7		27.30	358.6		11.60		Erroneous
11/29/2017	357.80	0.15	19.50	365.6	Dry	39.50	345.6	Dry	28.20	357.7		12.90		Erroneous
12/27/2017	357.30	0.00	19.70	365.4	Dry	39.00	346.1		28.50	357.4		13.30		Erroneous
1/24/2018	357.30	1.84	19.70	365.40	Dry	39.30	345.80		28.90	357.00		13.50	371.50	
2/21/2018	361.00	0.18	19.40	365.70	Dry	38.00	347.10		29.20	356.70		11.60	373.40	
3/28/2018	366.90	2.19	19.60	365.50	Dry	33.90	351.20		29.48	356.42		9.20	375.80	

Notes:  
1. Readings in red are classified as erroneous

**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			P-1A			P-1B			VBW/2-A			VBW/2-B		
Top of Well Elevation -->			385.10			385.10			385.90			385.00		
Bottom of Well Elevation -->			365.70			345.70			342.20			309.40	304	Maint. 2/16/2017
Depth of Well			19.40			39.40			43.70			75.60	81	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
4/25/2018	367.00	0.05	19.60	365.50	Dry	33.30	351.80		29.60	356.30		4.00	381.00	
5/30/2018	366.40	0.36	19.40	365.70	Dry	33.10	352.00		29.70	356.20		1.00	384.00	
6/28/2018	365.60	0.00	19.40	365.70	Dry	33.10	352.00		29.50	356.40		1.40	383.60	
7/25/2018	363.20	0.00	19.60	365.50	Dry	34.50	350.60		29.40	356.50		2.70	382.30	
8/28/2018	357.30	0.00	19.60	365.50	Dry	38.00	347.10		29.44	356.46		5.90	379.10	
9/27/2018	354.60	0.00	19.50	365.60	Dry	39.60	345.50	Dry	29.30	356.60		7.40	377.60	
10/24/2018	351.90	1.49	19.80	365.30	Dry	39.60	345.50	Dry	29.80	356.10		10.40	374.60	
11/28/2018	348.60	0.56	19.60	365.50	Dry	39.60	345.50	Dry	30.10	355.80		11.40	373.60	
12/21/2018	348.80	2.04	19.70	365.40	Dry	39.80	345.30	Dry	29.90	356.00		11.10	373.90	
1/30/2019	348.90	4.41	19.60	365.50	Dry	39.60	345.50	Dry	30.50	355.40		11.60	373.40	
2/27/2019	351.70	8.05	19.50	365.60	Dry	39.50	345.60	Dry	30.40	355.50		9.56	375.44	
3/28/2019	351.60	2.00	19.70	365.40	Dry	39.40	345.70	Dry	30.60	355.30		10.20	374.80	
4/25/2019	348.70	0.10	19.7	365.40		39.7	345.40	Dry	30.70	355.20		11.70	373.30	
5/30/2019	348.30	0.99	19.6	365.50		39.6	345.50	Dry	31.00	354.90		12.00	373.00	
6/26/2019	344.50	0.11	19.7	365.40		39.6	345.50	Dry	31.00	354.90		14.00	371.00	
7/5/2019	343.30	0.00	19.5	365.60		39.5	345.60	Dry	31.00	354.90		15.20	369.80	
7/30/2019	341.00	0.00	19.6	365.50		39.6	345.50	Dry	31.20	354.70		17.00	368.00	
8/27/2019	341.00	0.00	19.8	365.30		39.8	345.30	Dry	31.40	354.50		19.50	365.50	
9/26/2019	341.00	0.00	19.4	365.70		39.8	345.30	Dry	31.40	354.50		21.10	363.90	
10/24/2019	341.00	0.00	19.6	365.50		39.5	345.60	Dry	31.40	354.50		21.80	363.20	
11/26/2019	341.00	2.60	19.6	365.50		39.6	345.50	Dry	31.50	354.40		22.40	362.60	
12/16/2019	341.00	4.93	19.7	365.40	Dry	39.7	345.40	Dry	40.71			64.50		
1/28/2020	341.00	0.21	19.6	365.50	Dry	39.6	345.50	Dry	30.40	355.50		11.52	373.48	
2/26/2020	360.60	0.39	19.6	365.50	Dry	39.5	345.60	Dry	31.43	354.47		6.88	378.12	
3/24/2020	370.30	3.75	19.6	365.50	Dry	39.7	345.40	Dry	32.10	353.80		21.80	363.20	
4/23/2020	375.30	4.63	19.8	365.30		33.1	352.00		31.20	354.70		75.60		
5/28/2020	374.80	0.04	19.6	365.50		30.8	354.30				No data received			No data received
6/23/2020	373.60	0.00	19.6	365.50		30.5	354.60				No data received			No data received
7/29/2020	370.70	0.00	19.7	365.40		31.4	353.70				No data received			No data received
8/27/2020	367.80	0.00	19.6	365.50		32.8	352.30				No data received			No data received
9/29/2020	364.90	0.00	19.6	365.50		34.6	350.50				No data received			No data received
10/29/2020	354.80	0.00	19.7	365.40		37.9	347.20				No data received			No data received
11/24/2020	343.00	0.32	19.5	365.60		39.8	345.30	Dry			No data received			No data received
12/29/2020	343.50	1.14	19.5	365.60		39.6	345.50	Dry	30.10	355.80		14.30	370.70	
1/27/2021	355.70	2.45	19.70	365.40		39.60	345.50	Dry	30.00	355.90		6.30		
2/25/2021	365.90	0.03	19.80	365.30		39.40	345.70		30.40	355.50		0.30		
3/23/2021	370.80	1.27	19.70	365.40		34.40	350.70		30.70	355.20		-3.50		
4/28/2021	371.70	0.03	19.60	365.50		31.80	353.30		30.10	355.80		-4.20		
5/26/2021	370.00	0.05	19.60	365.50		32.00	353.10		9.20			1.31		
6/30/2021	366.30	0.00	19.60	365.50		33.50	351.60		9.01			3.40		
7/27/2021	361.50	0.03	19.40	365.70		35.90	349.20		8.90			6.00		
8/25/2021	356.30	0.00	19.60	365.50		28.80	356.30	Omitted	9.10			9.10		
9/28/2021	350.60	0.03	19.40	365.70		39.40	345.70		9.50			13.00		
10/27/2021	343.50	0.79	19.40	365.70		39.40	345.70		9.60			17.90		
11/25/2021	343.40	0.00	19.40	365.70		39.40	345.70	Dry	9.90			18.90		
12/21/2021	348.90	6.14	19.70	365.40		39.60	345.50	Dry	10.00			15.50		
1/25/2022	372.70	0.01	19.40	365.70	Dry	35.70	349.40		30.60	355.30		-3.80		
2/23/2022	374.60	0.32	19.70	365.40	Dry	29.80	355.30		30.20	355.70		-4.50		

Notes:  
1. Readings in red are classified as erroneous

**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			P-1A			P-1B			VBW/2-A			VBW/2-B		
Top of Well Elevation -->			385.10			385.10			385.90			385.00		
Bottom of Well Elevation -->			365.70			345.70			342.20			309.40	304	Maint. 2/16/2017
Depth of Well			19.40			39.40			43.70			75.60	81	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/29/2022	370.90	1.21	19.60	365.50	Dry	30.30	354.80		29.30	356.60		-13.80		
4/26/2022	367.80	0.04	19.60	365.50	Dry	32.10	353.00		28.70	357.20		12.30		
5/25/2022	360.70	0.03	19.60	365.50	Dry	35.40	349.70		29.00		No Response to drainage	-8.50		
6/29/2022	343.70	0.00	19.70	365.40	Dry	39.60	345.50	Dry	29.20			1.90		
7/26/2022	343.10	0.00	19.40	365.70	Dry	39.40	345.70	Dry	29.60			28.40		
8/30/2022	342.00	0.03	19.70	365.40	Dry	39.70	345.40	Dry	29.90			3.90		
9/29/2022	342.00	0.32	19.70	365.40	Dry	39.60	345.50	Dry	30.20			5.20		
10/26/2022	342.00	0.32	19.60	365.50	Dry	39.60	345.50	Dry	30.20			7.30		
11/23/2022	342.00	2.04	19.70	365.40	Dry	39.60	345.50	Dry	30.40			8.00		
12/28/2022	341.60	2.11	19.70	365.40	Dry	39.50	345.60	Dry	30.40			7.80		
1/26/2023	342.70	7.19	19.70	365.40	Dry	39.60	345.50	Dry	30.60			4.80		
2/28/2023	343.50	3.28	19.70	365.40	Dry	39.60	345.50	Dry	31.10			4.30		
3/29/2023	346.30	6.30	19.40	365.70	Dry	39.50	345.60	Dry	31.30			1.10		
4/25/2023	346.30	0.14	19.60	365.50	Dry	39.60	345.50	Dry	3.50		Omitted	1.70		
5/24/2023	346.00	1.15	19.40	365.70	Dry	39.40	345.70	Dry	31.40			2.00		
6/28/2023	345.80	0.11	19.68	365.42	Dry	39.62	345.48	Dry	31.40			2.50		
7/27/2023	343.90	0.00	19.60	365.50	Dry	39.50	345.60	Dry	31.50			3.00		
8/29/2023	343.00	2.25	19.50	365.60	Dry	39.50	345.60	Dry	31.75			3.89		
9/27/2023	342.70	0.00	19.50	365.60	Dry	39.50	345.60	Dry	31.70			4.20		
10/26/2023	342.00	0.18	19.70	365.40	Dry	39.60	345.50	Dry	31.70			4.50		
11/29/2023	346.30	0.70	19.70	365.40	Dry	35.50	349.60		31.80			5.10		
12/21/2023	341.40	1.08	19.80	365.30	Dry	39.74	345.36	Dry	31.70			5.30		
1/30/2024	341.50	2.03	19.60	365.50	Dry	39.60	345.50	Dry	31.94	353.96		5.45	379.55	
2/22/2024	344.00	9.11	19.70	365.40	Dry	39.50	345.60	Dry	31.87	354.03		2.47	382.53	
3/26/2024	343.00	3.07	19.80	365.30	Dry	39.74	345.36	Dry	31.82	354.08		3.31	381.69	
4/25/2024	343.00	1.62	19.80	365.30	Dry	39.75	345.35	Dry	32.00	353.90		3.40	381.60	
5/1/2024	343.30	0	19.70	365.40	Dry	39.70	345.40	Dry	42.84	343.06		27.96	357.04	
5/23/2024	343.00	0.2	19.70	365.40	Dry	39.80	345.30	Dry	42.73	343.17		27.90	357.10	
6/27/2024	342.00	0	19.80	365.30	Dry	39.70	345.40	Dry	42.78	343.12		28.05	356.95	
7/25/2024	343.00	0	19.70	365.40	Dry	39.80	345.30	Dry	42.84	343.06		27.96	357.04	
8/28/2024	343.00	0	19.70	365.40	Dry	39.70	345.40	Dry	42.83	343.07		28.15	356.85	
9/25/2024	343.00	0	19.70	365.40	Dry	39.60	345.50	Dry	43.00	342.90		28.22	356.78	
10/29/2024	343.00	0	19.50	365.60	Dry	39.50	345.60	Dry	42.79	343.11		27.96	357.04	
11/26/2024	343.00	0.11	19.70	365.40	Dry	39.60	345.50	Dry	42.79	343.11		27.92	357.08	
12/18/2024	343.00	0.01	19.70	365.40	Dry	39.60	345.50	Dry	42.84	343.06		28.04	356.96	
1/29/2025	343.00	0.87	19.70	365.40	Dry	39.60	345.50	Dry	42.66	343.24		27.73	357.27	
2/26/2025	343.00	3.17	19.70	365.40	Dry	39.60	345.50	Dry	42.65	343.25		27.76	357.24	
3/25/2025	343.00	2.51	19.70	365.40	Dry	39.50	345.60	Dry	42.51	343.39		27.70	357.30	
4/14/2025	343.00	#N/A	19.70	365.40	Dry	39.65	345.45	Dry	42.61	343.29		27.81	357.19	
4/24/2025	343.00	0.55	19.70	365.40	Dry	38.70	346.40		42.63	343.27		27.79	357.21	
5/28/2025	343.00	0.13	19.70	365.40	Dry	39.70	345.40	Dry	42.62	343.28		27.90	357.10	
7/7/2025	343.00	0.22	19.70	365.40	Dry	39.80	345.30	Dry	42.62	343.28		27.97	357.03	
7/29/2025	343.00	0	19.30	365.80	Dry	39.60	345.50	Dry	42.61	343.29		27.95	357.05	
8/26/2025	343.00	0	19.70	365.40	Dry	39.65	345.45	Dry	42.73	343.17		28.08	356.92	
9/25/2025	343.00	0.13	19.70	365.40	Dry	39.70	345.40	Dry	42.76	343.14		28.04	356.96	
10/23/2025	343.00	1.21	19.70	365.40	Dry	39.70	345.40	Dry	42.72	343.18		27.96	357.04	
11/18/2025	343.00	6.11	19.70	365.40	Dry	39.60	345.50	Dry	42.41	343.49		27.59	357.41	
12/17/2025	343.00	2.51	19.70	365.40	Dry	39.60	345.50	Dry	42.49	343.41		27.68	357.32	

Notes:  
1. Readings in red are classified as erroneous

**TABLE 3  
SYPHON CANYON DAM  
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS  
JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			P-3A			P-3B			VBW/4			VBW/5		
Top of Well Elevation -->			385.60			385.60			340.00	342.8	Raised 6/23/2015	330.70	333.7	Raised 8/25/2015
Bottom of Well Elevation -->			362.30			340.30			314.70	314.7		314.00	314.0	
Depth of Well			23.30			45.30			25.30	28.1		16.70	19.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/1/2008														
2/1/2008														
3/25/2008	365.10		22.70	362.9		38.70	346.9		13.70	326.3		5.10	325.6	
4/25/2008	366.40		22.70	362.9		38.70	346.9		13.70	326.3		5.10	325.6	
5/28/2008	365.30		23.30	362.3		39.30	346.3		13.70	326.3		5.10	325.6	
6/25/2008	365.00		23.30	362.3		39.80	345.8		14.30	325.7		5.10	325.6	
7/18/2008	364.50		23.30	362.3		39.80	345.8		14.30	325.7		5.10	325.6	
8/25/2008	363.50		23.30	362.3		40.30	345.3		14.30	325.7		5.70	325.0	
9/25/2008	363.00		23.30	362.3		40.30	345.3		14.30	325.7		5.70	325.0	
10/21/2008	362.00		23.30	362.3		40.30	345.3		14.30	325.7		5.70	325.0	
11/25/2008	365.00		23.30	362.3		39.80	345.8		14.30	325.7		5.70	325.0	
12/23/2008	365.00		23.30	362.3		39.80	345.8		14.30	325.7		5.70	325.0	
1/26/2009	364.50		23.30	362.3		40.30	345.3		14.30	325.7		5.70	325.0	
2/24/2009	364.50		23.30	362.3		40.30	345.3		14.30	325.7		5.70	325.0	
3/23/2009	368.50		23.30	362.3		38.70	345.9		14.30	325.7		5.70	325.0	
4/27/2009	367.50		23.30	362.3		39.30	346.3		14.30	325.7		5.20	325.5	
5/22/2009	367.00		23.30	362.3		39.30	346.3		14.30	325.7		5.20	325.5	
6/29/2009	372.00		23.30	362.3		36.70	348.9		14.30	325.7		4.10	326.6	
7/31/2009	371.00		23.30	362.3		38.30	347.3		15.30	324.7		5.10	325.6	
8/26/2009	370.00		23.30	362.3		38.30	347.3		15.30	324.7		5.10	325.6	
9/29/2009	369.50		23.30	362.3		39.30	346.3		15.30	324.7		5.70	325.0	
10/30/2009	369.00		23.30	362.3		38.30	347.3		14.30	325.7		4.70	326.0	
11/30/2009	368.00		23.30	362.3		38.30	347.3		14.30	325.7		4.10	326.6	
12/30/2009	368.00		23.30	362.3		38.30	348.2		14.30	325.7		4.10	326.6	
3/1/2010	368.00		23.00	362.6		37.40	347.9		13.50	326.5		3.00	327.7	
3/30/2010	368.00		23.10	362.5		37.70	347.9		13.50	326.5		3.20	327.5	
4/4/2010	368.70		22.80	362.7		37.70	347.9		13.50	326.5		3.30	327.4	
4/27/2010	368.40		22.80	362.8		37.80	347.8		13.40	326.6		3.20	327.5	
5/26/2010	367.84		22.90	362.7		37.90	347.7		13.60	326.4		3.40	327.3	
6/29/2010	367.00		23.00	362.6		38.10	347.5		13.60	326.4		3.50	327.2	
7/27/2010	367.00		23.60	362.0	Dry	38.30	347.3		13.60	326.4		3.60	327.1	
8/27/2010	366.80		23.40	362.2	Dry	38.10	347.5		13.80	326.2		3.60	327.1	
9/28/2010	366.80		23.00	362.6		38.60	347.0		13.60	326.4		3.70	327.0	
10/26/2010	368.50		23.10	362.5		38.70	346.9		13.60	326.4		2.50	328.2	
11/30/2010	371.40		23.00	362.6		37.80	347.8		13.70	326.3		3.30	327.4	
12/28/2010	374.70		23.20	362.4		36.60	349.0		13.50	326.5		2.60	328.1	
1/4/2011	374.80		23.40	362.2	Dry	36.50	349.1		13.40	326.6		2.30	328.4	
1/6/2011	374.80		23.40	362.2	Dry	36.50	349.2		13.40	326.6		2.50	328.2	
1/7/2011	374.80		23.40	362.2	Dry	36.50	349.1		13.50	326.5		2.70	328.0	
1/8/2011	374.80		23.60	362.0	Dry	36.80	348.8		13.60	326.3		3.10	327.6	
1/9/2011	374.80		23.40	362.2	Dry	36.80	348.8		13.70	326.3		3.10	327.6	
1/10/2011	374.80		23.40	362.2	Dry	36.60	349.0		13.60	326.4		3.00	327.8	
1/11/2011	374.80		23.20	362.4		36.80	348.8		13.40	326.6		2.70	328.0	
1/17/2011	374.80		23.40	362.2	Dry	36.70	348.9		13.50	326.6		3.00	327.8	
1/19/2011	374.70		23.40	362.2	Dry	36.80	348.8		13.50	326.5		2.80	327.9	
1/21/2011	374.80		23.40	362.2	Dry	36.90	348.7		13.50	326.5		2.80	327.9	
1/27/2011	374.60		23.00	362.6		37.00	348.6		13.50	326.5		2.90	327.8	
2/3/2011	374.60		23.40	362.2	Dry	37.20	348.4		13.50	326.5		3.20	327.5	

Notes:

1. Readings in red are classified as erroneous

**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			P-3A			P-3B			VBW/4			VBW/5		
Top of Well Elevation -->			385.60			385.60			340.00	342.8	Raised 6/23/2015	330.70	333.7	Raised 8/25/2015
Bottom of Well Elevation -->			362.30			340.30			314.70	314.7		314.00	314.0	
Depth of Well			23.30			45.30			25.30	28.1		16.70	19.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
2/8/2011	374.70		23.40	362.2	Dry	37.20	348.4		13.50	326.5		3.30	327.4	
2/28/2011	374.70		22.90	362.7		37.40	348.2		13.50	326.5		2.90	327.8	
3/28/2011	372.50	2.35	23.00	362.6		37.50	348.1		13.50	326.5		3.00	327.7	
4/28/2011	372.10	0.27	23.20	362.4		37.90	347.7		13.70	326.3		3.80	326.9	
5/18/2011	371.80	0.03	23.10	362.5		37.90	347.7		13.50	326.5		3.40	327.3	
5/25/2011	371.70	0.30	23.00	362.6		37.90	347.7		13.70	326.3		3.50	327.2	
6/28/2011	370.90	0.03	22.90	362.7		38.00	347.6		13.60	326.4		3.50	327.2	
7/26/2011	370.30	0.03	23.00	362.7		38.20	347.4		13.70	326.3		3.90	326.8	
8/24/2011	369.60	0.03	23.70	361.9	Dry	38.30	347.3		16.00	324.0		3.50	327.2	
8/30/2011	369.40		23.10	362.5		38.60	347.0		16.00	324.0		3.60	327.1	
9/13/2011	364.30	0.00	23.00	362.6		40.40	345.2		15.90	324.1		4.00	326.7	
9/27/2011	361.90		23.00	362.6		43.10	342.5		16.10	323.9		5.00	325.7	
10/11/2011	358.50	1.03	23.00	362.6		44.10	341.5		16.10	323.9		5.60	325.1	
10/25/2011	356.00	1.03	22.90	362.7		45.30	340.3		16.30	323.7		6.50	324.2	
11/29/2011	355.00	1.51	23.70	361.9	Dry	45.50	340.1	Dry	16.80	323.2		7.20	323.5	
12/28/2011	355.00	0.28	23.70	361.9	Dry	45.60	340.0	Dry	17.40	322.7		7.60	323.1	
1/26/2012	355.00	1.05	23.60	362.0	Dry	45.60	340.0	Dry	17.50	322.5		7.80	322.9	
2/28/2012	355.00	0.73	23.60	362.0	Dry	45.60	340.0	Dry	17.90	322.1		7.90	322.9	
3/27/2012	352.40	0.73	23.60	362.0	Dry	45.70	339.9	Dry	18.40	321.6		8.30	322.4	
4/23/2012	352.10	1.35	23.60	362.0	Dry	45.70	339.9	Dry	18.30	321.7		8.10	322.6	
5/30/2012	352.20	0.07	23.70	361.9	Dry	45.60	340.0	Dry	18.60	321.4		8.40	322.3	
6/13/2012	352.20		23.70	361.9	Dry	45.60	340.0	Dry	18.70	321.3		8.60	322.1	
6/26/2012	352.20	0.00	23.60	362.0	Dry	45.50	340.1	Dry	2.80		Cap was off bad read	8.70	322.0	
7/24/2012	352.20	0.23	23.60	362.0	Dry	45.60	340.0	Dry	4.20		Cap was off bad read	7.75	323.0	
8/8/2012	352.20	0.23	23.70	362.9	Dry	45.70	339.9	Dry	4.70		Cap was off bad read	7.50	323.2	
8/28/2012	351.80	0.00	23.60	362.0	Dry	45.50	340.1	Dry	19.20	320.8		7.90	322.8	
8/29/2012	351.80	0.00	23.80	361.8	Dry	45.70	339.9	Dry	18.90	321.1		8.20	322.5	
9/25/2012	351.30	0.00	23.70	361.9	Dry	45.60	340.0	Dry	19.40	320.6		8.40	322.3	
10/31/2012	351.00	0.09	23.60	362.0	Dry	45.60	340.0	Dry	19.60	320.4		8.90	321.8	
11/27/2012	351.00	0.87	23.60	362.0	Dry	45.50	340.1	Dry	19.20	320.8		9.20	321.5	
12/12/2012	351.00	1.13	23.60	362.0	Dry	45.60	340.0	Dry	19.00	321.0		9.20	321.5	
1/29/2013	366.10	1.30	23.80	361.8	Dry	46.00	339.6	Dry	19.00	321.0		5.40	325.3	
2/21/2013	372.10	0.42	23.40	362.2	Dry	42.90	342.7		18.80	321.2		4.30	326.4	
3/28/2013	371.90	0.79	23.70	361.9	Dry	41.10	344.5		18.10	321.9		3.10	327.6	
4/25/2013	371.40	0.00	23.60	362.0	Dry	41.00	344.6		17.80	322.2		2.70	328.0	
5/22/2013	370.90	0.00	23.80	361.8	Dry	41.10	344.5		17.70	322.3		2.90	327.8	
6/25/2013	370.20	0.00	23.60	362.0	Dry	41.00	344.6		17.00	323.0		2.50	328.2	
7/23/2013	369.40	0.00	23.60	362.0	Dry	41.30	344.3		16.80	323.2		2.70	328.0	
8/21/2013	368.60	0.00	23.70	361.9	Dry	41.70	343.9		16.80	323.4		2.80	327.9	
9/25/2013	367.70	0.00	23.70	361.9	Dry	42.00	343.6		16.30	323.7		2.80	327.9	
10/30/2013	366.90	0.00	23.70	361.9	Dry	42.70	342.9		16.10	323.9		3.00	327.7	
11/26/2013	366.50	0.59	23.60	362.0	Dry	42.60	343.0		15.90	324.1		3.00	327.7	
12/17/2013	366.20	0.70	23.70	361.9	Dry	43.00	342.6		15.90	324.1		3.20	327.5	
1/28/2014	365.50	0.00	23.80	361.8	Dry	43.70	341.9		15.70	324.3		3.40	327.3	
2/25/2014	365.40	0.76	23.80	361.8	Dry	44.00	341.6		15.90	324.2		3.65	327.1	
3/25/2014	365.30		23.80	361.8	Dry	43.90	341.7		16.00	324.0		3.40	327.3	
3/28/2014	365.30	2.02	23.60	362.0	Dry	43.90	341.7		15.60	324.5		3.40	327.3	
4/25/2014	364.50	0.52	23.60	362.0	Dry	44.10	341.5		15.50	324.5		3.50	327.2	

Notes:

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**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			P-3A			P-3B			VBW/4			VBW/5		
Top of Well Elevation -->			385.60			385.60			340.00	342.8	Raised 6/23/2015	330.70	333.7	Raised 8/25/2015
Bottom of Well Elevation -->			362.30			340.30			314.70	314.7		314.00	314.0	
Depth of Well			23.30			45.30			25.30	28.1		16.70	19.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
5/28/2014	363.80	0.00	23.70	361.9	Dry	44.40	341.2		15.50	324.5		3.70	327.0	
6/25/2014	363.00	0.00	23.70	361.9	Dry	45.00	345.2		15.70	324.3		3.90	326.8	
7/30/2014	361.90	0.00	23.70	361.9	Wet	45.10	342.5		15.40	324.6		3.90	326.8	
8/27/2014	361.10	0.04	23.60	362.0	Dry	45.60	340.0	Wet	15.50	324.5		4.30	326.4	
9/23/2014	360.50	0.00	23.60	362.0	Wet	45.50	340.1	Wet	13.50	326.5		4.20	326.5	
10/29/2014	359.50	0.00	23.60	362.0	Dry	45.80	339.8	Dry	15.60	324.4		4.50	326.2	
11/24/2014	359.40	0.32	23.70	361.9	Dry	45.60	340.0	Dry	15.70	324.3		4.60	326.1	
12/30/2014	359.40	3.98	23.70	361.9	Dry	45.80	339.8	Dry	15.80	324.2		4.70	326.0	
1/27/2015	359.00	1.42	23.60	362.0	Wet	45.60	340.0	Dry	15.90	324.1		4.70	326.0	
2/26/2015	358.60	0.46	23.60	362.0	Wet	45.50	340.1	Wet	15.90	324.1		4.80	325.9	
3/27/2015	358.00	0.63	23.70	361.9	Dry	45.90	339.7	Dry	16.00	324.0		5.30	325.4	
4/26/2015	331.00	0.22	23.60	362.0	Dry	45.60	340.0	Dry	16.20	323.8		8.00	322.7	
5/27/2015	332.00	1.79	23.60	362.0	Dry	45.60	340.0	Dry	16.10	323.9		7.90	322.8	
6/23/2015	331.00	0.00	23.60	362.0	Wet	45.70	339.9	Wet	20.50	322.3	Extended casing	12.30	318.4	
7/30/2015	331.00	0.00	23.70	361.9	Dry	45.60	340.0	Dry	20.60	322.2		13.70	317.0	
8/25/2015	331.00	0.00	23.50	362.1	Dry	45.50	340.1	Dry	21.50	321.3	Wet	17.60	316.1	Extended Casing
9/30/2015	331.00	1.97	23.70	361.9	Dry	45.70	339.9	Dry	22.50	320.3		18.30	315.4	
10/29/2015	331.00	0.18	23.70	361.9	Dry	45.70	339.9	Dry	22.90	319.9		18.40	315.3	
11/25/2015	331.00	0.17	23.70	361.9	Dry	45.50	340.1	Dry	23.40	319.4		19.50	314.2	Dry
12/30/2015	331.00	1.42	23.70	361.9	Dry	45.50	340.1	Dry	23.80	319.0	VW installed	19.50	314.2	Dry; VW Installed
1/26/2016	343.70	2.97	23.60	362.0	Dry	45.60	340.0	Dry	17.90	325.0		16.07	317.6	
2/24/2016	363.80	0.26	23.70	361.9	Dry	45.70	339.9	Dry	18.10	324.7		9.93	323.8	
3/29/2016	374.90	1.50	23.60	362.0	Dry	41.90	343.7		17.10	325.7		5.40	328.3	
4/28/2016	375.50	0.09	23.60	362.1	Dry	37.70	347.9		15.60	327.2		4.30	329.4	
5/24/2016	374.40	0.13	23.30	362.3		38.00	347.6		14.20	328.6		4.00	329.7	
6/29/2016	373.70	0.00	23.30	362.3		38.10	347.5		14.30	328.5		4.10	329.6	
7/28/2016	372.20	0.00	23.60	362.0	Dry	38.50	347.1		14.40	328.4		4.11	329.6	
8/25/2016	367.10	0.00	23.70	361.9	Dry	40.90	344.7		14.50	328.3		4.70	329.0	
9/27/2016	363.30	0.00	23.80	361.8	Dry	41.80	343.8		14.60	328.2		5.30	328.4	
10/25/2016	362.10	0.82	23.60	362.0	Dry	42.80	342.8		14.10	328.7		5.00	328.7	
11/22/2016	361.80	1.69	23.70	361.9	Dry	43.00	342.6				VW was not logging			
12/28/2016	368.55	3.61	23.70	361.9	Dry	40.70	344.9		13.50	329.3		3.00	330.7	
1/25/2017	375.80	6.48	23.60	362.0	Dry	36.40	349.2		12.90	329.9		1.30	332.4	
2/28/2017	375.90	3.95	23.60	362.0	Dry	35.30	350.4		12.60	330.2		1.20	332.5	
3/15/2017	375.80	3.61	23.70	361.9	Dry	35.70	349.9		12.20	330.6		1.10	332.6	
3/28/2017	375.50	0.09	23.90	361.7	Dry	35.00	350.6		12.10	330.7		1.10	332.6	
4/26/2017	375.00	0.04	23.70	361.9	Dry	35.20	350.4		11.90	330.9		1.10	332.6	
5/23/2017	374.60	0.00	23.60	362.0	Dry	35.60	350.0		11.50	331.3		1.10	332.6	
6/22/2017	373.80	0.00	23.70	361.9	Dry	28.20	357.4	Erroneous	11.30	331.5		1.40	332.3	
7/26/2017	371.40	0.00	23.50	362.1	Dry	36.70	348.9		11.10	331.7		2.00	331.7	
8/30/2017	368.60	0.00	23.70	361.9	Dry	38.10	347.5		11.10	331.7		2.90	330.8	
9/28/2017	364.80	0.00	23.50	362.1	Dry	40.10	345.5		10.90	331.9		3.50	330.2	
10/26/2017	359.00	0.00	23.60	362.0	Dry	42.10	343.5		11.00	331.8		4.80	328.9	
11/29/2017	357.80	0.15	23.60	362.0	Dry	45.60	340.0	Dry	11.00	331.8		5.80	327.9	
12/27/2017	357.30	0.00	23.60	362.0	Dry	44.60	341.0		11.00	331.8		5.90	327.8	
1/24/2018	357.30	1.84	23.60	362.00	Dry	44.80	340.80		11.00	331.80		6.10	327.60	
2/21/2018	361.00	0.18	23.30	362.30	Wet	43.70	341.90		11.00	331.80		5.60	328.10	
3/28/2018	366.90	2.19	23.60	362.00	Dry	40.70	344.90		11.60	331.20		5.00	328.70	

Notes:  
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**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			P-3A			P-3B			VBW/4			VBW/5		
Top of Well Elevation -->			385.60			385.60			340.00			330.70		
Bottom of Well Elevation -->			362.30			340.30			314.70			314.0		
Depth of Well			23.30			45.30			25.30			16.70		
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
4/25/2018	367.00	0.05	23.60	362.00	Dry	40.20	345.40		11.40	331.40		4.90	328.80	
5/30/2018	366.40	0.36	23.30	362.30	Wet	40.40	345.20		11.60	331.20		5.10	328.60	
6/28/2018	365.60	0.00	23.50	362.10	Dry	40.70	344.90		11.50	331.30		5.20	328.50	
7/25/2018	363.20	0.00	23.70	361.90	Dry	41.50	344.10		11.60	331.20		5.50	328.20	
8/28/2018	357.30	0.00	23.60	362.00	Dry	44.25	341.35		11.70	331.10		6.40	327.30	
9/27/2018	354.60	0.00	23.50	362.10	Dry	45.40	340.20	Dry	11.80	331.00		6.90	326.80	
10/24/2018	351.90	1.49	23.60	362.00	Dry	45.60	340.00	Dry	12.00	330.80		7.60	326.10	
11/28/2018	348.60	0.56	23.50	362.10	Dry	45.50	340.10	Dry	12.30	330.50		8.60	325.10	
12/21/2018	348.80	2.04	23.60	362.00	Dry	45.70	339.90	Dry	12.20	330.60		8.32	325.38	
1/30/2019	348.90	4.41	23.50	362.10	Dry	45.50	340.10	Dry	12.80	330.00		9.00	324.70	
2/27/2019	351.70	8.05	23.50	362.10	Dry	45.50	340.10	Dry	12.70	330.10		7.90	325.80	
3/28/2019	351.60	2.00	23.60	362.00	Dry	45.70	339.90	Dry	12.60	330.20		8.20	325.50	
4/25/2019	348.70	0.10	23.7	361.90	Dry	45.5	340.10	Dry	12.30	330.50		9.20	324.50	
5/30/2019	348.30	0.99	23.6	362.00	Dry	45.6	340.00	Dry	12.30	330.50		9.50	324.20	
6/26/2019	344.50	0.11	26.3	359.30	Omitted	45.5	340.10	Dry	12.50	330.30		16.70	317.00	
7/5/2019	343.30	0.00	23.6	362.00	Dry	45.5	340.10	Dry	12.70	330.10		10.60	323.10	
7/30/2019	341.00	0.00	23.6	362.00	Dry	45.6	340.00	Dry	13.80	329.00		11.50	322.20	
8/27/2019	341.00	0.00	23.7	361.90	Dry	45.6	340.00	Dry	15.17	327.63		14.37	319.33	
9/26/2019	341.00	0.00	23.6	362.00	Dry	45.5	340.10	Dry	15.90	326.90		16.40	317.30	
10/24/2019	341.00	0.00	23.5	362.10	Dry	45.5	340.10	Dry	16.50	326.30		16.70	317.00	
11/26/2019	341.00	2.60	23.6	362.00	Dry	45.7	339.90	Dry	12.60	330.20		16.70	317.00	
12/16/2019	341.00	4.93	23.5	362.10	Dry	45.6	340.00	Dry	13.10	329.70		8.70	325.00	
1/28/2020	341.00	0.21	23.5	362.10	Dry	45.5	340.10	Dry	12.80	330.00		9.00	324.70	
2/26/2020	360.60	0.39	23.4	362.20	Dry	45.5	340.10	Dry	18.84	323.96		11.62	322.08	
3/24/2020	370.30	3.75	23.5	362.10	Dry	45.6	340.00	Dry	14.30	328.50		4.10	329.60	
4/23/2020	375.30	4.63	23.7	361.90	Dry	38.5	347.10		17.20	325.60		5.30	328.40	
5/28/2020	374.80	0.04	23.6	362.00	Dry	37.8	347.80				No data received			No data received
6/23/2020	373.60	0.00	23.5	362.10	Dry	37.8	347.80				No data received			No data received
7/29/2020	370.70	0.00	23.6	362.00	Dry	39	346.60				No data received			No data received
8/27/2020	367.80	0.00	23.6	362.00	Dry	40.3	345.30				No data received			No data received
9/29/2020	364.90	0.00	23.6	362.00	Dry	41.4	344.20				No data received			No data received
10/29/2020	354.80	0.00	23.6	362.00	Dry	43.8	341.80				No data received			No data received
11/24/2020	343.00	0.32	23.6	362.00	Dry	45.6	340.00	Dry			No data received			No data received
12/29/2020	343.50	1.14	23.5	362.10	Dry	45.5	340.10	Dry	15.20	327.60		11.60	322.10	
1/27/2021	355.70	2.45	23.60	362.00	Dry	45.60	340.00	Dry	15.20	327.60		8.40	325.30	
2/25/2021	365.90	0.03	23.50	362.10	Dry	42.50	343.10		15.20	327.60		6.20	327.50	
3/23/2021	370.80	1.27	23.60	362.00	Dry	39.00	346.60		15.00	327.80		5.10	328.60	
4/28/2021	371.70	0.03	23.50	362.10	Dry	37.50	348.10		14.40	328.40		4.50	329.20	
5/26/2021	370.00	0.05	23.60	362.00	Dry	38.10	347.50		14.10	328.70		4.50	329.20	
6/30/2021	366.30	0.00	23.60	362.00	Dry	39.70	345.90		14.00	328.80		4.85	328.85	
7/27/2021	361.50	0.03	23.30	362.30	Dry	41.70	343.90		13.70	329.10		5.20	328.50	
8/25/2021	356.30	0.00	23.60	362.00	Dry	44.10	341.50		13.50	329.30		5.70	328.00	
9/28/2021	350.60	0.03	23.40	362.20	Dry	45.40	340.20	Dry	13.90	328.90		6.90	326.80	
10/27/2021	343.50	0.79	23.30	362.30	Dry	45.30	340.30		13.40	329.40		9.30	324.40	
11/25/2021	343.40	0.00	23.30	362.30	Dry	45.30	340.30		13.80	329.00		9.80	323.90	
12/21/2021	348.90	6.14	23.60	362.00	Dry	45.60	340.00	Dry	13.90	328.90		9.60	324.10	
1/25/2022	372.70	0.01	23.60	362.00	Dry	39.20	346.40		14.10	328.70		4.00	329.70	
2/23/2022	374.60	0.32	23.60	362.00	Dry	35.90	349.70		13.40	329.40		3.80	329.90	

Notes:  
1. Readings in red are classified as erroneous

**TABLE 3  
SYPHON CANYON DAM  
PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS  
JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			P-3A			P-3B			VBW/4			VBW/5		
Top of Well Elevation -->			385.60			385.60			340.00	342.8	Raised 6/23/2015	330.70	333.7	Raised 8/25/2015
Bottom of Well Elevation -->			362.30			340.30			314.70	314.7		314.00	314.0	
Depth of Well			23.30			45.30			25.30	28.1		16.70	19.7	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/29/2022	370.90	1.21	23.60	362.00	Dry	37.40	348.20		13.30	329.50		4.50	329.20	
4/26/2022	367.80	0.04	23.60	362.00	Dry	39.30	346.30		13.10	329.70		4.60	329.10	
5/25/2022	360.70	0.03	23.60	362.00	Dry	41.90	343.70		13.10	329.70		5.70	328.00	
6/29/2022	343.70	0.00	23.60	362.00	Dry	46.00	339.60	Dry	13.00	329.80		9.50	324.20	
7/26/2022	343.10	0.00	23.30	362.30	Dry	45.30	340.30	Dry	13.40	329.40		10.80	322.90	
8/30/2022	342.00	0.03	23.60	362.00	Dry	45.60	340.00	Dry	14.00	328.80		11.60	322.10	
9/29/2022	342.00	0.32	23.70	361.90	Dry	45.50	340.10	Dry	14.60	328.20		12.80	320.90	
10/26/2022	342.00	0.32	23.70	361.90	Dry	45.50	340.10	Dry	15.10	327.70		14.60	319.10	
11/23/2022	342.00	2.04	23.60	362.00	Dry	45.60	340.00	Dry	16.00	326.80		15.90	317.80	
12/28/2022	341.60	2.11	23.40	362.20	Dry	45.70	339.90	Dry	16.70	326.10		16.40	317.30	
1/26/2023	342.70	7.19	23.50	362.10	Dry	45.70	339.90	Dry	17.70	325.10		14.60	319.10	
2/28/2023	343.50	3.28	23.60	362.00	Dry	45.60	340.00	Dry	18.50	324.30		14.00	319.70	
3/29/2023	346.30	6.30	23.50	362.10	Dry	45.50	340.10	Dry	18.70	324.10		11.00	322.70	
4/25/2023	346.30	0.14	23.50	362.10	Dry	45.60	340.00	Dry	18.50	324.30		11.60	322.10	
5/24/2023	346.00	1.15	23.50	362.10	Dry	45.60	340.00	Dry	18.60	324.20		21.10	312.60	Dry?
6/28/2023	345.80	0.11	23.62	361.98	Dry	45.60	340.00	Dry	18.60	324.20		12.50	321.20	
7/27/2023	343.90	0.00	23.50	362.10	Dry	45.60	340.00	Dry	18.60	324.20		12.90	320.80	
8/29/2023	343.00	2.25	23.50	362.10	Dry	45.50	340.10	Dry	18.87	323.93		22.19	311.51	Dry?
9/27/2023	342.70	0.00	23.40	362.20	Dry	45.30	340.30	Dry	18.90	323.90		13.70	320.00	
10/26/2023	342.00	0.18	27.70	357.90	Dry	45.60	340.00	Dry	18.90	323.90		13.90	319.80	
11/29/2023	346.30	0.70	23.60	362.00	Dry	45.50	340.10	Dry	19.10	323.70		14.10	319.60	
12/21/2023	341.40	1.08	23.75	361.85	Dry	45.70	339.90	Dry	19.00	323.80		14.30	319.40	
1/30/2024	341.50	2.03	23.70	361.90	Dry	45.50	340.10	Dry	19.29	320.71		14.50	316.20	
2/22/2024	344.00	9.11	23.40	362.20	Dry	45.50	340.10	Dry	19.14	320.86		12.11	318.59	
3/26/2024	343.00	3.07	23.75	361.85	Dry	45.72	339.88	Dry	19.14	320.86		12.48	318.22	
4/25/2024	343.00	1.62	23.77	361.83	Dry	45.70	339.90	Dry	19.22	320.78		12.54	318.16	
5/1/2024	343.30	0	23.60	362.00	Dry	45.60	340.00	Dry	22.60	317.40		12.84	317.86	
5/23/2024	343.00	0.2	23.60	362.00	Dry	45.70	339.90	Dry	22.40	317.60		13.20	317.50	
6/27/2024	342.00	0	23.80	361.80	Dry	45.70	339.90	Dry	22.63	317.37		13.81	316.89	
7/25/2024	343.00	0	23.60	362.00	Dry	45.70	339.90	Dry	22.60	317.40		12.84	317.86	
8/28/2024	343.00	0	23.60	362.00	Dry	45.60	340.00	Dry	22.88	317.12		16.55	314.15	
9/25/2024	343.00	0	23.60	362.00	Dry	45.60	340.00	Dry	22.96	317.04		16.70	314.00	Dry
10/29/2024	343.00	0	23.60	362.00	Dry	45.60	340.00	Dry	22.73	317.27		16.70	314.00	Dry
11/26/2024	343.00	0.11	23.60	362.00	Dry	45.60	340.00	Dry	17.07	322.93		16.70	314.00	Dry
12/18/2024	343.00	0.01	23.60	362.00	Dry	45.60	340.00	Dry	17.14	322.86		16.70	314.00	Dry
1/29/2025	343.00	0.87	23.60	362.00	Dry	45.60	340.00	Dry	17.18	322.82		16.70	314.00	Dry
2/26/2025	343.00	3.17	23.50	362.10	Dry	45.70	339.90	Dry	17.20	322.80		16.70	314.00	Dry
3/25/2025	343.00	2.51	23.50	362.10	Dry	45.50	340.10	Dry	14.75	325.25		16.70	314.00	Dry
4/14/2025	343.00	#N/A	23.65	361.95	Dry	45.60	340.00	Dry	14.71	325.29		16.70	314.00	Dry
4/24/2025	343.00	0.55	23.60	362.00	Dry	45.60	340.00	Dry	14.28	325.72		16.70	314.00	Dry
5/28/2025	343.00	0.13	23.60	362.00	Dry	45.60	340.00	Dry	14.79	325.21		16.70	314.00	Dry
7/7/2025	343.00	0.22	23.60	362.00	Dry	45.70	339.90	Dry	14.84	325.16		16.70	314.00	Dry
7/29/2025	343.00	0	23.60	362.00	Dry	45.60	340.00	Dry	14.79	325.21		16.70	314.00	Dry
8/26/2025	343.00	0	23.64	361.96	Dry	45.63	339.97	Dry	14.67	325.33		16.70	314.00	Dry
9/25/2025	343.00	0.13	23.30	362.30		45.60	340.00	Dry	14.72	325.28		16.70	314.00	Dry
10/23/2025	343.00	1.21	23.50	362.10	Dry	45.40	340.20	Dry	14.89	325.11		16.70	314.00	Dry
11/18/2025	343.00	6.11	23.60	362.00	Dry	45.60	340.00	Dry	14.81	325.19		16.70	314.00	Dry
12/17/2025	343.00	2.51	23.60	362.00	Dry	45.60	340.00	Dry	14.89	325.11		16.70	314.00	Dry

Notes:

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**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			VBW/6			VBW/7			VBW/8		
Top of Well Elevation -->			370.20	371.4	Raised 8/23/2015	349.70	351.3	Raised 6/23/2015	345.30	346.4	Raised 6/23/2015
Bottom of Well Elevation -->			360.60	360.6		338.10	338.1		336.80	336.8	
Depth of Well			9.50	10.8		11.50	13.2		8.50	9.6	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
1/1/2008											
2/1/2008											
3/25/2008	365.10										
4/25/2008	366.40										
5/28/2008	365.30										
6/25/2008	365.00										
7/18/2008	364.50										
8/25/2008	363.50										
9/25/2008	363.00										
10/21/2008	362.00										
11/25/2008	365.00										
12/23/2008	365.00										
1/26/2009	364.50										
2/24/2009	364.50										
3/23/2009	368.50										
4/27/2009	367.50										
5/22/2009	367.00										
6/29/2009	372.00										
7/31/2009	371.00										
8/26/2009	370.00										
9/29/2009	369.50										
10/30/2009	369.00										
11/30/2009	368.00										
12/30/2009	368.00										
3/1/2010	368.00										
3/30/2010	368.00										
4/4/2010	368.70										
4/27/2010	368.40										
5/26/2010	367.84										
6/29/2010	367.00										
7/27/2010	367.00										
8/27/2010	366.80										
9/28/2010	366.80										
10/26/2010	368.50										
11/30/2010	371.40										
12/28/2010	374.70										
1/4/2011	374.80										
1/6/2011	374.80										
1/7/2011	374.80										
1/8/2011	374.80										
1/9/2011	374.80										
1/10/2011	374.80										
1/11/2011	374.80										
1/17/2011	374.80										
1/19/2011	374.70		9.40	360.7	Dry	6.90	342.8		3.90	341.4	
1/21/2011	374.80		9.60	360.6	Dry	7.00	342.6		4.20	341.4	
1/27/2011	374.60		9.50	360.7	Dry	7.20	342.4		4.20	341.2	
2/3/2011	374.60		9.50	360.7	Dry	7.70	342.0		4.40	341.1	

Notes:

1. Readings in red are classified as erroneous

**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			VBW/6			VBW/7			VBW/8		
Top of Well Elevation -->			370.20	371.4	Raised 8/23/2015	349.70	351.3	Raised 6/23/2015	345.30	346.4	Raised 6/23/2015
Bottom of Well Elevation -->			360.60	360.6		338.10	338.1		336.80	336.8	
Depth of Well			9.50	10.8		11.50	13.2		8.50	9.6	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
2/8/2011	374.70		9.50	360.7	Dry	7.70	342.0		4.50	340.9	
2/28/2011	374.70		9.70	361.5	Dry	8.40	341.3		4.80	340.9	
3/28/2011	372.50	2.35	9.60	360.6	Dry	5.00		Omitted	4.00	340.5	
4/28/2011	372.10	0.27	9.60	360.6	Dry	8.60	341.1		4.50	341.3	
5/18/2011	371.80	0.03	9.60	360.6	Dry	8.80	340.9		4.20	340.8	
5/25/2011	371.70	0.30	9.60	360.6	Dry	9.10	340.6		4.55	340.8	
6/28/2011	370.90	0.03	9.50	360.7	Dry	10.00	339.7		6.10	339.2	
7/26/2011	370.30	0.03	9.50	360.7	Dry	9.30	340.4		6.30	339.0	
8/24/2011	369.60	0.03	9.50	360.7	Dry	9.20	340.5		8.40	336.9	
8/30/2011	369.40		9.80	360.4	Dry	10.20	339.5		8.40	336.9	
9/13/2011	364.30	0.00	9.60	360.6	Dry	10.10	339.6		7.70	337.6	
9/27/2011	361.90		9.50	360.7	Dry	10.00	339.7		7.70	337.6	
10/11/2011	358.50	1.03	9.50	360.7	Dry	9.50	340.2		7.00	338.3	
10/25/2011	356.00	1.03	9.50	360.7	Dry	9.90	339.8		7.10	338.2	
11/29/2011	355.00	1.51	9.50	360.7	Dry	9.80	339.9		7.50	337.8	
12/28/2011	355.00	0.28	9.65	360.5	Dry	9.40	340.3		6.90	338.4	
1/26/2012	355.00	1.05	9.45	360.7	Dry	10.10	339.6		7.40	337.9	
2/28/2012	355.00	0.73	9.60	360.6	Dry	10.60	339.1		7.80	337.5	
3/27/2012	352.40	0.73	9.80	360.4	Dry	10.30	339.4		7.90	337.4	
4/23/2012	352.10	1.35	9.65	360.5	Dry	10.50	339.2		7.90	337.4	
5/30/2012	352.20	0.07	9.60	360.6	Dry	9.90	339.8		7.80	337.5	
6/13/2012	352.20		9.70	360.5	Dry	10.40	339.3		7.70	337.6	
6/26/2012	352.20	0.00	9.70	360.5	Dry	10.50	339.2		7.60	337.7	
7/24/2012	352.20	0.23	9.60	360.6	Dry	10.50	339.2		8.10	337.2	
8/8/2012	352.20	0.23	9.80	360.4	Dry	10.70	339.0		8.30	337.0	
8/28/2012	351.80	0.00	9.60	360.6	Dry	10.10	339.6		7.60	337.7	
8/29/2012	351.80	0.00	9.80	360.4	Dry	10.30	339.4		8.00	337.3	
9/25/2012	351.30	0.00	9.50	360.7	Dry	9.90	339.8		7.40	337.9	
10/31/2012	351.00	0.09	9.60	360.6	Dry	10.30	339.4		7.60	337.7	
11/27/2012	351.00	0.87	9.60	360.6	Dry	10.20	339.5		7.50	337.8	
12/12/2012	351.00	1.13	9.50	360.7	Dry	10.50	339.2		8.00	337.3	
1/29/2013	366.10	1.30	9.70	360.5	Dry	11.00	338.7		8.30	337.0	
2/21/2013	372.10	0.42	9.70	360.5	Dry	11.20	338.5		8.10	337.2	
3/28/2013	371.90	0.79	9.60	360.6	Dry	10.80	338.9		8.30	337.0	
4/25/2013	371.40	0.00	9.40	360.8	Dry	10.30	339.4		7.90	337.4	
5/22/2013	370.90	0.00	9.80	360.4	Dry	11.20	338.5		8.50	336.8	
6/25/2013	370.20	0.00	9.70	360.5	Dry	10.90	338.8		8.30	337.0	
7/23/2013	369.40	0.00	9.60	360.6	Dry	11.10	338.6		8.30	337.0	
8/21/2013	368.60	0.00	9.70	360.5	Dry	11.00	338.7		8.30	337.0	Wet
9/25/2013	367.70	0.00	9.60	360.6	Dry	11.10	338.6		8.30	337.0	Dry
10/30/2013	366.90	0.00	9.70	360.5	Dry	11.10	338.6		8.40	336.9	Dry
11/26/2013	366.50	0.59	9.70	360.5	Dry	11.10	338.6	Wet	8.30	337.0	Wet
12/17/2013	366.20	0.70	9.70	360.5	Dry	10.90	338.8		8.30	337.0	Wet
1/28/2014	365.50	0.00	9.70	360.4	Dry	10.30	339.4		8.40	336.9	
2/25/2014	365.40	0.76	9.75	360.6	Dry	11.20	338.5	Wet	8.40	336.9	Wet
3/25/2014	365.30		9.60	360.6	Dry	10.80	338.9		8.30	337.0	
3/28/2014	365.30	2.02	9.60	360.6	Dry	11.10	338.6		8.30	337.0	
4/25/2014	364.50	0.52	9.60	360.5	Dry	10.70	339.0		8.30	337.0	

Notes:

1. Readings in red are classified as erroneous

**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			VBW/6			VBW/7			VBW/8		
Top of Well Elevation -->			370.20	371.4	Raised 8/23/2015	349.70	351.3	Raised 6/23/2015	345.30	346.4	Raised 6/23/2015
Bottom of Well Elevation -->			360.60	360.6		338.10	338.1		336.80	336.8	
Depth of Well			9.50	10.8		11.50	13.2		8.50	9.6	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
5/28/2014	363.80	0.00	9.70	360.4	Dry	10.80	338.9		8.10	337.2	
6/25/2014	363.00	0.00	9.80	360.4	Dry	10.30	339.4		8.40	336.9	
7/30/2014	361.90	0.00	9.80	360.4	Dry	10.50	339.2		8.40	336.9	
8/27/2014	361.10	0.04	9.70	360.5	Dry	11.10	338.6	Wet	8.30	337.0	
9/23/2014	360.50	0.00	9.60	360.6	Dry	11.10	338.6	Wet	8.20	337.1	
10/29/2014	359.50	0.00	9.70	360.5	Dry	11.10	338.6	Wet	8.30	337.0	
11/24/2014	359.40	0.32	9.70	360.5	Dry	10.90	338.8	Wet	8.20	337.1	
12/30/2014	359.40	3.98	9.70	360.5	Dry	10.50	339.2	Wet	8.30	337.0	
1/27/2015	359.00	1.42	9.70	360.5	Dry	10.90	338.8		8.20	337.1	
2/26/2015	358.60	0.46	9.70	360.5	Dry	11.10	338.6	Wet	8.30	337.0	
3/27/2015	358.00	0.63	9.70	360.5	Dry	11.20	338.5	Wet	8.30	337.0	
4/26/2015	331.00	0.22	9.60	360.6	Dry	11.10	338.6	Wet	8.40	336.9	Wet
5/27/2015	332.00	1.79	9.60	360.6	Dry	11.10	338.6	Wet	8.40	336.9	Wet
6/23/2015	331.00	0.00	9.80	360.6	Dry	12.30	339.0		9.50	336.9	Wet
7/30/2015	331.00	0.00	10.40	361.0	Dry	11.00	340.3	Wet	8.30	338.1	Dry
8/25/2015	331.00	0.00	9.80	360.6	Dry	12.50	338.8	Wet	9.50	336.9	Wet
9/30/2015	331.00	1.97	10.90	360.5	Dry	12.60	338.7	Wet	9.50	336.9	Dry
10/29/2015	331.00	0.18	9.80	360.6	Dry	12.50	338.8		9.50	336.9	Dry
11/25/2015	331.00	0.17	10.90	360.5	Dry	12.70	338.6	Dry	9.50	336.9	Dry
12/30/2015	331.00	1.42	10.90	360.5	Dry	12.70	338.6	Dry	9.50	336.9	Dry
1/26/2016	343.70	2.97	9.80	360.6	Dry	12.50	338.8	Dry	9.30	337.1	
2/24/2016	363.80	0.26	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
3/29/2016	374.90	1.50	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
4/28/2016	375.50	0.09	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
5/24/2016	374.40	0.13	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
6/29/2016	373.70	0.00	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
7/28/2016	372.20	0.00	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
8/25/2016	367.10	0.00	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
9/27/2016	363.30	0.00	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
10/25/2016	362.10	0.82	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
11/22/2016	361.80	1.69						Dry			
12/28/2016	368.55	3.61	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
1/25/2017	375.80	6.48	10.80	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
2/28/2017	375.90	3.95	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
3/15/2017	375.80	3.61	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
3/28/2017	375.50	0.09	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
4/26/2017	375.00	0.04	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
5/23/2017	374.60	0.00	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
6/22/2017	373.80	0.00	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
7/26/2017	371.40	0.00	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
8/30/2017	368.60	0.00	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
9/28/2017	364.80	0.00	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
10/26/2017	359.00	0.00	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
11/29/2017	357.80	0.15	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
12/27/2017	357.30	0.00	10.90	360.5	Dry	12.50	338.8	Dry	9.50	336.9	Dry
1/24/2018	357.30	1.84	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
2/21/2018	361.00	0.18	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
3/28/2018	366.90	2.19	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry

Notes:

1. Readings in red are classified as erroneous

**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			VBW/6			VBW/7			VBW/8		
Top of Well Elevation -->			370.20	371.4	Raised 8/23/2015	349.70	351.3	Raised 6/23/2015	345.30	346.4	Raised 6/23/2015
Bottom of Well Elevation -->			360.60	360.6		338.10	338.1		336.80	336.8	
Depth of Well			9.50	10.8		11.50	13.2		8.50	9.6	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
4/25/2018	367.00	0.05	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
5/30/2018	366.40	0.36	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
6/28/2018	365.60	0.00	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
7/25/2018	363.20	0.00	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
8/28/2018	357.30	0.00	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
9/27/2018	354.60	0.00	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
10/24/2018	351.90	1.49	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
11/28/2018	348.60	0.56	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
12/21/2018	348.80	2.04	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
1/30/2019	348.90	4.41	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
2/27/2019	351.70	8.05	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
3/28/2019	351.60	2.00	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
4/25/2019	348.70	0.10	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
5/30/2019	348.30	0.99	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
6/26/2019	344.50	0.11	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
7/5/2019	343.30	0.00	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
7/30/2019	341.00	0.00	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
8/27/2019	341.00	0.00	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
9/26/2019	341.00	0.00	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
10/24/2019	341.00	0.00	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
11/26/2019	341.00	2.60	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
12/16/2019	341.00	4.93	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
1/28/2020	341.00	0.21	10.90	360.50	Dry	12.5	338.80	Dry	9.8	336.60	Dry
2/26/2020	360.60	0.39	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
3/24/2020	370.30	3.75	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
4/23/2020	375.30	4.63	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
5/28/2020	374.80	0.04			No data received			No data received			No data received
6/23/2020	373.60	0.00			No data received			No data received			No data received
7/29/2020	370.70	0.00			No data received			No data received			No data received
8/27/2020	367.80	0.00			No data received			No data received			No data received
9/29/2020	364.90	0.00			No data received			No data received			No data received
10/29/2020	354.80	0.00			No data received			No data received			No data received
11/24/2020	343.00	0.32			No data received			No data received			No data received
12/29/2020	343.50	1.14	10.90	360.50	Dry	12.5	338.80	Dry	9.5	336.90	Dry
1/27/2021	355.70	2.45	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
2/25/2021	365.90	0.03	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
3/23/2021	370.80	1.27	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
4/28/2021	371.70	0.03	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
5/26/2021	370.00	0.05	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
6/30/2021	366.30	0.00	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
7/27/2021	361.50	0.03	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
8/25/2021	356.30	0.00	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
9/28/2021	350.60	0.03	10.90	360.50	Dry	12.50	338.80	Dry	7.50	338.90	Dry
10/27/2021	343.50	0.79	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
11/25/2021	343.40	0.00	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
12/21/2021	348.90	6.14	10.90	360.50	Dry	12.50	338.80	Dry	9.00	337.40	Dry
1/25/2022	372.70	0.01	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
2/23/2022	374.60	0.32	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry

Notes:

1. Readings in red are classified as erroneous

**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			VBW/6			VBW/7			VBW/8		
Top of Well Elevation -->			370.20	371.4	Raised 8/23/2015	349.70	351.3	Raised 6/23/2015	345.30	346.4	Raised 6/23/2015
Bottom of Well Elevation -->			360.60	360.6		338.10	338.1		336.80	336.8	
Depth of Well			9.50	10.8		11.50	13.2		8.50	9.6	
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment	Reading (ft)	Elevation (ft)	Comment
3/29/2022	370.90	1.21	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
4/26/2022	367.80	0.04	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
5/25/2022	360.70	0.03	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
6/29/2022	343.70	0.00	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
7/26/2022	343.10	0.00	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
8/30/2022	342.00	0.03	10.90	360.50	Dry	12.30	339.00	Dry	9.50	336.90	Dry
9/29/2022	342.00	0.32	11.70	359.70	Dry	13.20	338.10	Dry	10.50	335.90	Dry
10/26/2022	342.00	0.32	11.60	359.80	Dry	13.20	338.10	Dry	10.50	335.90	Dry
11/23/2022	342.00	2.04	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
12/28/2022	341.60	2.11	11.50	359.90	Dry	13.30	338.00	Dry	10.20	336.20	Dry
1/26/2023	342.70	7.19	11.30	360.10	Dry	13.40	337.90	Dry	10.20	336.20	Dry
2/28/2023	343.50	3.28	10.30	361.10	Dry	11.70	339.60	Dry	8.50	337.90	Dry
3/29/2023	346.30	6.30	11.60	359.80	Dry	13.30	338.00	Dry	10.60	335.80	Dry
4/25/2023	346.30	0.14	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
5/24/2023	346.00	1.15	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
6/28/2023	345.80	0.11	10.90	360.50	Dry	12.50	338.80	Dry	9.5	336.90	Dry
7/27/2023	343.90	0.00	10.90	360.50	Dry	12.50	338.80	Dry	0		Omitted
8/29/2023	343.00	2.25	9.97	361.43	Dry	11.69	339.61	Dry	8.26	338.14	Dry
9/27/2023	342.70	0.00	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
10/26/2023	342.00	0.18	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
11/29/2023	346.30	0.70	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
12/21/2023	341.40	1.08	10.90	360.50	Dry	12.50	338.80	Dry	9.50	336.90	Dry
1/30/2024	341.50	2.03	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
2/22/2024	344.00	9.11	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
3/26/2024	343.00	3.07	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
4/25/2024	343.00	1.62	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
5/1/2024	343.30	0	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
5/23/2024	343.00	0.2	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
6/27/2024	342.00	0	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
7/25/2024	343.00	0	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
8/28/2024	343.00	0	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
9/25/2024	343.00	0	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
10/29/2024	343.00	0	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
11/26/2024	343.00	0.11	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
12/18/2024	343.00	0.01	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
1/29/2025	343.00	0.87	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
2/26/2025	343.00	3.17	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
3/25/2025	343.00	2.51	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
4/14/2025	343.00	#N/A	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
4/24/2025	343.00	0.55	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
5/28/2025	343.00	0.13	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
7/7/2025	343.00	0.22	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
7/29/2025	343.00	0	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
8/26/2025	343.00	0	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
9/25/2025	343.00	0.13	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
10/23/2025	343.00	1.21	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
11/18/2025	343.00	6.11	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry
12/17/2025	343.00	2.51	10.90	359.30	Dry	12.50	337.20	Dry	9.50	335.80	Dry

Notes:

1. Readings in red are classified as erroneous

**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			VBW/9			Seepage Flow Point		
Top of Well Elevation -->			344.90	346.4	Raised 6/23/2015	(liter/min)		
Bottom of Well Elevation -->			335.40	335.4				
Depth of Well			9.50	11.0				
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading		Comment
						(liter/min)	(gal/min)	
1/1/2008								
2/1/2008								
3/25/2008	365.10							
4/25/2008	366.40							
5/28/2008	365.30							
6/25/2008	365.00							
7/18/2008	364.50							
8/25/2008	363.50							
9/25/2008	363.00							
10/21/2008	362.00							
11/25/2008	365.00							
12/23/2008	365.00							
1/26/2009	364.50					32.00	8.45	
2/24/2009	364.50					32.00	8.45	
3/23/2009	368.50					37.85	10.00	
4/27/2009	367.50					37.85	10.00	
5/22/2009	367.00					32.00	8.45	
6/29/2009	372.00					56.78	15.00	
7/31/2009	371.00					37.85	10.00	
8/26/2009	370.00					56.78	15.00	
9/29/2009	369.50					45.42	12.00	
10/30/2009	369.00					37.85	10.00	
11/30/2009	368.00					37.85	10.00	
12/30/2009	368.00					37.85	10.00	
3/1/2010	368.00					131.00	34.61	Drain was clogges
3/30/2010	368.00					46.80	12.36	
4/4/2010	368.70					38.40	10.14	
4/27/2010	368.40					40.20	10.62	
5/26/2010	367.84					37.50	9.91	
6/29/2010	367.00					39.00	10.30	
7/27/2010	367.00					31.50	8.32	
8/27/2010	366.80					31.24	8.25	
9/28/2010	366.80					31.57	8.34	
10/26/2010	368.50					35.28	9.32	
11/30/2010	371.40					37.50	9.91	
12/28/2010	374.70					75.00	19.81	
1/4/2011	374.80					69.00	18.23	
1/6/2011	374.80							
1/7/2011	374.80							
1/8/2011	374.80					30.30	8.00	
1/9/2011	374.80					31.20	8.24	
1/10/2011	374.80							
1/11/2011	374.80					28.57	7.55	
1/17/2011	374.80							
1/19/2011	374.70		4.50	340.4		33.80	8.93	
1/21/2011	374.80		4.80	340.1				
1/27/2011	374.60		4.90	340.0		45.00	11.89	
2/3/2011	374.60		5.30	339.6				

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**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			VBW/9			Seepage Flow Point		
Top of Well Elevation -->			344.90	346.4	Raised 6/23/2015	(liter/min)		
Bottom of Well Elevation -->			335.40	335.4				
Depth of Well			9.50	11.0				
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading		Comment
						(liter/min)	(gal/min)	
2/8/2011	374.70		5.30	339.6				
2/28/2011	374.70		5.60	339.3		34.30	9.06	
3/28/2011	372.50	2.35	4.90	340.0		52.92	13.98	
4/28/2011	372.10	0.27	5.90	339.0		11.70	3.09	
5/18/2011	371.80	0.03	6.50	338.4		16.60	4.39	
5/25/2011	371.70	0.30	6.90	338.0		13.00	3.43	
6/28/2011	370.90	0.03	7.40	337.5		29.10	7.69	
7/26/2011	370.30	0.03	7.40	337.5		3.64	0.96	
8/24/2011	369.60	0.03	9.50	335.4		7.00	1.85	
8/30/2011	369.40		9.50	335.4		7.00	1.85	
9/13/2011	364.30	0.00	9.50	335.4		31.50	8.32	
9/27/2011	361.90		9.50	335.4		0.05	0.01	
10/11/2011	358.50	1.03	9.30	335.6		0.05	0.01	
10/25/2011	356.00	1.03	9.50	335.4		0.00	0.00	
11/29/2011	355.00	1.51	9.60	335.3		0.00	0.00	
12/28/2011	355.00	0.28	9.60	335.3		0.00	0.00	
1/26/2012	355.00	1.05	9.40	335.5		0.00	0.00	
2/28/2012	355.00	0.73	9.40	335.5		0.00	0.00	
3/27/2012	352.40	0.73	9.60	335.3		0.00	0.00	
4/23/2012	352.10	1.35	9.40	335.5		0.00	0.00	
5/30/2012	352.20	0.07	9.40	335.5		0.00	0.00	
6/13/2012	352.20		9.40	335.5		0.00	0.00	
6/26/2012	352.20	0.00	9.50	335.4		0.00	0.00	
7/24/2012	352.20	0.23	9.40	335.5		0.00	0.00	
8/8/2012	352.20	0.23	9.60	335.3		0.00	0.00	
8/28/2012	351.80	0.00	9.40	335.5		0.00	0.00	
8/29/2012	351.80	0.00	9.70	335.2		0.00	0.00	
9/25/2012	351.30	0.00	9.40	335.5		0.00	0.00	
10/31/2012	351.00	0.09	9.40	335.5		0.00	0.00	reservoir was low
11/27/2012	351.00	0.87	9.50	335.4		0.00	0.00	reservoir was low
12/12/2012	351.00	1.13	9.50	335.4		0.00	0.00	reservoir was low
1/29/2013	366.10	1.30	9.50	335.4				reservoir was low
2/21/2013	372.10	0.42	9.50	335.4				reservoir was low
3/28/2013	371.90	0.79	9.40	335.5				reservoir was low
4/25/2013	371.40	0.00	9.40	335.5				reservoir was low
5/22/2013	370.90	0.00	9.60	335.3				reservoir was low
6/25/2013	370.20	0.00	9.40	335.5				reservoir was low
7/23/2013	369.40	0.00	9.40	335.5				reservoir was low
8/21/2013	368.60	0.00	9.50	335.4				reservoir was low
9/25/2013	367.70	0.00	9.45	335.5				reservoir was low
10/30/2013	366.90	0.00	9.10	335.8		23.60	6.23	reservoir was low
11/26/2013	366.50	0.59	10.90	334.0	Wet	22.20	5.86	reservoir was low
12/17/2013	366.20	0.70	9.50	335.4		23.60	6.23	reservoir was low
1/28/2014	365.50	0.00	9.50	335.4		18.42	4.87	reservoir was low
2/25/2014	365.40	0.76	9.60	335.3	Dry	15.00	3.96	reservoir was low
3/25/2014	365.30		9.50	335.4		17.28	4.56	reservoir was low
3/28/2014	365.30	2.02	9.40	335.5		11.82	3.12	vault is being relocated
4/25/2014	364.50	0.52	9.50	335.4		18.00	4.76	vault is being relocated

Notes:

1. Readings in red are classified as erroneous

**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			VBW/9			Seepage Flow Point		
Top of Well Elevation -->			344.90	346.4	Raised 6/23/2015	(liter/min)		
Bottom of Well Elevation -->			335.40	335.4				
Depth of Well			9.50	11.0				
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading		Comment
						(liter/min)	(gal/min)	
5/28/2014	363.80	0.00	9.40	335.5		14.98	3.96	vault is being relocated
6/25/2014	363.00	0.00	9.60	335.3		14.19	3.75	vault is being relocated
7/30/2014	361.90	0.00	9.60	335.3		14.68	3.88	vault is being relocated
8/27/2014	361.10	0.04	9.50	335.4		15.20	4.02	vault is being relocated
9/23/2014	360.50	0.00	9.50	335.4	Wet	13.20	3.49	vault is being relocated
10/29/2014	359.50	0.00	9.40	335.5		12.00	3.17	vault is being relocated
11/24/2014	359.40	0.32	9.50	335.4		8.70	2.30	vault is being relocated
12/30/2014	359.40	3.98	9.50	335.4		8.10	2.14	seepage point is back
1/27/2015	359.00	1.42	9.50	335.4		6.90	1.82	
2/26/2015	358.60	0.46	9.50	335.4		6.40	1.69	
3/27/2015	358.00	0.63	9.60	335.3		6.10	1.61	
4/26/2015	331.00	0.22	9.60	335.3	Wet	0.00	0.00	
5/27/2015	332.00	1.79	9.60	335.3	Wet	0.00	0.00	
6/23/2015	331.00	0.00	11.00	335.4	Dry	0.00	0.00	
7/30/2015	331.00	0.00	10.90	335.5	Wet	0.00	0.00	
8/25/2015	331.00	0.00	10.90	335.5	Wet	0.00	0.00	
9/30/2015	331.00	1.97	11.00	335.4	Wet	0.00	0.00	
10/29/2015	331.00	0.18	11.00	335.4	Dry	0.00	0.00	
11/25/2015	331.00	0.17	11.00	335.4	Dry	0.00	0.00	
12/30/2015	331.00	1.42	11.00	335.4	Dry	0.00	0.00	
1/26/2016	343.70	2.97	10.75	335.6		0.00	0.00	
2/24/2016	363.80	0.26	10.90	335.5		0.00	0.00	
3/29/2016	374.90	1.50	11.00	335.4		0.85	0.22	
4/28/2016	375.50	0.09	11.00	335.4		3.90	1.03	
5/24/2016	374.40	0.13	11.00	335.4		4.20	1.11	
6/29/2016	373.70	0.00	11.00	335.4		4.60	1.22	
7/28/2016	372.20	0.00	11.00	335.4		5.10	1.35	
8/25/2016	367.10	0.00	10.97	335.4		3.84	1.01	
9/27/2016	363.30	0.00	11.00	335.4		1.80	0.48	
10/25/2016	362.10	0.82	10.90	335.5		3.40	0.90	
11/22/2016	361.80	1.69				4.86	1.28	
12/28/2016	368.55	3.61	10.95	335.4		6.12	1.62	
1/25/2017	375.80	6.48	10.80	335.6		22.00	5.81	
2/28/2017	375.90	3.95	11.00	335.4		22.30	5.89	
3/15/2017	375.80	3.61	11.00	335.4		22.30	5.89	
3/28/2017	375.50	0.09	11.00	335.4		25.70	6.79	
4/26/2017	375.00	0.04	11.00	335.4		28.00	7.40	
5/23/2017	374.60	0.00	11.00	335.4		16.32	4.31	
6/22/2017	373.80	0.00	11.00	335.4		30.12	7.96	
7/26/2017	371.40	0.00	11.00	335.4		30.60	8.08	
8/30/2017	368.60	0.00	11.00	335.4		36.00	9.51	
9/28/2017	364.80	0.00	11.00	335.4		16.00	4.23	
10/26/2017	359.00	0.00	11.00	335.4		2.80	0.74	
11/29/2017	357.80	0.15	11.00	335.4		9.20	2.43	
12/27/2017	357.30	0.00	11.00	335.4		6.80	1.80	
1/24/2018	357.30	1.84	11.00	335.40		5.70	1.51	
2/21/2018	361.00	0.18	11.00	335.40		6.20	1.64	
3/28/2018	366.90	2.19	11.00	335.40		22.00	5.81	

Notes:

1. Readings in red are classified as erroneous

**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

Monitoring Well -->			VBW/9			Seepage Flow Point		
Top of Well Elevation -->			344.90	346.4	Raised 6/23/2015	(liter/min)		
Bottom of Well Elevation -->			335.40	335.4				
Depth of Well			9.50	11.0				
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading		Comment
						(liter/min)	(gal/min)	
4/25/2018	367.00	0.05	11.00	335.40		12.80	3.38	
5/30/2018	366.40	0.36	11.00	335.40		14.16	3.74	
6/28/2018	365.60	0.00	11.00	335.40		11.20	2.96	
7/25/2018	363.20	0.00	11.00	335.40		12.84	3.39	
8/28/2018	357.30	0.00	11.00	335.40		4.00	1.06	
9/27/2018	354.60	0.00	11.00	335.40		1.02	0.27	
10/24/2018	351.90	1.49	11.00	335.40		0.00	0.00	
11/28/2018	348.60	0.56	11.00	335.40		0.00	0.00	
12/21/2018	348.80	2.04	11.00	335.40		0.00	0.00	
1/30/2019	348.90	4.41	11.00	335.40		0.00	0.00	
2/27/2019	351.70	8.05	11.00	335.40		0.00	0.00	
3/28/2019	351.60	2.00	11.00	335.40		0.00	0.00	
4/25/2019	348.70	0.10	11	335.40		0.00	0.00	
5/30/2019	348.30	0.99	11	335.40		0.00	0.00	
6/26/2019	344.50	0.11	11	335.40		0.00	0.00	
7/5/2019	343.30	0.00	11	335.40		0.00	0.00	
7/30/2019	341.00	0.00	11	335.40		0.00	0.00	
8/27/2019	341.00	0.00	11	335.40		0.00	0.00	
9/26/2019	341.00	0.00	11	335.40		0.00	0.00	
10/24/2019	341.00	0.00	11	335.40		0.00	0.00	
11/26/2019	341.00	2.60	11	335.40		0.00	0.00	
12/16/2019	341.00	4.93	11	335.40		0.00	0.00	
1/28/2020	341.00	0.21	11	335.40		0.00	0.00	
2/26/2020	360.60	0.39	11	335.40		0.00	0.00	
3/24/2020	370.30	3.75	11	335.40		0.03	0.01	
4/23/2020	375.30	4.63	11	335.40		0.90	0.24	
5/28/2020	374.80	0.04			No data received	1.10	0.29	
6/23/2020	373.60	0.00			No data received	2.20	0.58	
7/29/2020	370.70	0.00			No data received	1.32	0.35	
8/27/2020	367.80	0.00			No data received	0.97	0.26	
9/29/2020	364.90	0.00			No data received	0.54	0.14	
10/29/2020	354.80	0.00			No data received	0.63	0.17	
11/24/2020	343.00	0.32			No data received	0.00	0.00	
12/29/2020	343.50	1.14	11	335.40		0.00	0.00	
1/27/2021	355.70	2.45	11.00	335.40		0.00	0.00	
2/25/2021	365.90	0.03	11.00	335.40		1.50	0.40	
3/23/2021	370.80	1.27	11.00	335.40		3.66	0.97	
4/28/2021	371.70	0.03	11.00	335.40		4.32	1.14	
5/26/2021	370.00	0.05	11.00	335.40		4.80	1.27	
6/30/2021	366.30	0.00	11.00	335.40		5.40	1.43	
7/27/2021	361.50	0.03	11.00	335.40		4.88	1.29	
8/25/2021	356.30	0.00	11.00	335.40		3.00	0.79	
9/28/2021	350.60	0.03	11.00	335.40		1.40	0.37	
10/27/2021	343.50	0.79	11.00	335.40		0.00	0.00	
11/25/2021	343.40	0.00	11.00	335.40		0.00	0.00	
12/21/2021	348.90	6.14	11.00	335.40		0.00	0.00	
1/25/2022	372.70	0.01	11.00	335.40	Dry	2.81	0.74	
2/23/2022	374.60	0.32	11.00	335.40	Dry	7.5	1.98	

Notes:  
1. Readings in red are classified as erroneous

**TABLE 3**  
**SYPHON CANYON DAM**  
**PIEZOMETER WATER LEVELS AND SEEPAGE MEASUREMENTS**  
**JANUARY 2008 THROUGH DECEMBER 2025**

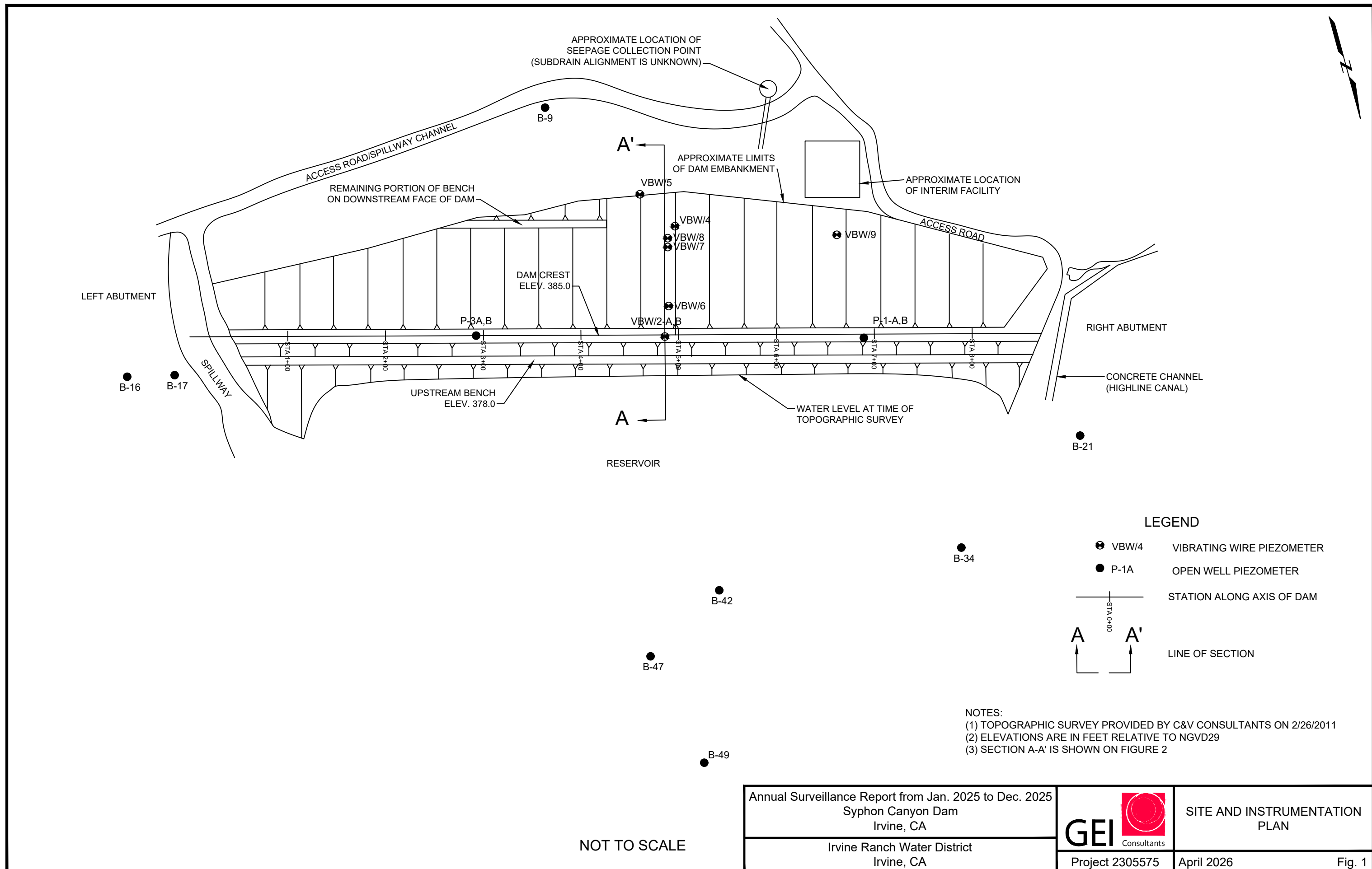
Monitoring Well -->			VBW/9			Seepage Flow Point		
Top of Well Elevation -->			344.90	346.4	Raised 6/23/2015	(liter/min)		
Bottom of Well Elevation -->			335.40	335.4				
Depth of Well			9.50	11.0				
Date	Reservoir Elevation (ft)	Monthly Rainfall (in.)	Reading (ft)	Elevation (ft)	Comment	Reading		Comment
						(liter/min)	(gal/min)	
3/29/2022	370.90	1.21	11.00	335.40	Dry	5.07	1.34	
4/26/2022	367.80	0.04	11.00	335.40	Dry	1.35	0.36	
5/25/2022	360.70	0.03	11.00	335.40	Dry	3.36	0.89	
6/29/2022	343.70	0.00	11.00	335.40	Dry	0.00	0.00	
7/26/2022	343.10	0.00	11.00	335.40	Dry	0.00	0.00	
8/30/2022	342.00	0.03	11.00	335.40	Dry	0.00	0.00	
9/29/2022	342.00	0.32	11.30	335.10	Dry	0.00	0.00	
10/26/2022	342.00	0.32	11.30	335.10	Dry	0.00	0.00	
11/23/2022	342.00	2.04	11.00	335.40	Dry	0.00	0.00	
12/28/2022	341.60	2.11	11.20	335.20	Dry	0.00	0.00	
1/26/2023	342.70	7.19	11.10	335.30	Dry	0.00	0.00	
2/28/2023	343.50	3.28	10.40	336.00		0.00	0.00	
3/29/2023	346.30	6.30	11.70	334.70	Dry	0.00	0.00	
4/25/2023	346.30	0.14	11.00	335.40	Dry	0.00	0.00	
5/24/2023	346.00	1.15	11.00	335.40	Dry	0.00	0.00	
6/28/2023	345.80	0.11	11.00	335.40	Dry	0.00	0.00	
7/27/2023	343.90	0.00	11.00	335.40	Dry	0.00	0.00	
8/29/2023	343.00	2.25	10.14	336.26		0.00	0.00	
9/27/2023	342.70	0.00	11.00	335.40	Dry	0.00	0.00	
10/26/2023	342.00	0.18	11.00	335.40	Dry	0.00	0.00	
11/29/2023	346.30	0.70	11.00	335.40	Dry	0.00	0.00	
12/21/2023	341.40	1.08	11.00	335.40	Dry	0.00	0.00	
1/30/2024	341.50	2.03	11.00	333.90	Dry	0.00	0.00	
2/22/2024	344.00	9.11	11.00	333.90	Dry	0.00	0.00	
3/26/2024	343.00	3.07	11.00	333.90	Dry	0.00	0.00	
4/25/2024	343.00	1.62	11.00	333.90	Dry	0.00	0.00	
5/1/2024	343.30	0	11.00	333.90	Dry	0.00	0.00	
5/23/2024	343.00	0.2	11.00	333.90	Dry	0.00	0.00	
6/27/2024	342.00	0	11.00	333.90	Dry	0.00	0.00	
7/25/2024	343.00	0	11.00	333.90	Dry	0.00	0.00	
8/28/2024	343.00	0	11.00	333.90	Dry	0.00	0.00	
9/25/2024	343.00	0	11.00	333.90	Dry	0.00	0.00	
10/29/2024	343.00	0	11.00	333.90	Dry	0.00	0.00	
11/26/2024	343.00	0.11	11.00	333.90	Dry	0.00	0.00	
12/18/2024	343.00	0.01	11.00	333.90	Dry	0.00	0.00	
1/29/2025	343.00	0.87	11.00	333.90	Dry	0.00	0.00	
2/26/2025	343.00	3.17	11.00	333.90	Dry	0.00	0.00	
3/25/2025	343.00	2.51	11.00	333.90	Dry	0.00	0.00	
4/14/2025	343.00	#N/A	11.00	333.90	Dry	0.00	0.00	
4/24/2025	343.00	0.55	11.00	333.90	Dry	0.00	0.00	
5/28/2025	343.00	0.13	11.00	333.90	Dry	0.00	0.00	
7/7/2025	343.00	0.22	11.00	333.90	Dry	0.00	0.00	
7/29/2025	343.00	0	11.00	333.90	Dry	0.00	0.00	
8/26/2025	343.00	0	11.00	333.90	Dry	0.00	0.00	
9/25/2025	343.00	0.13	11.00	333.90	Dry	0.00	0.00	
10/23/2025	343.00	1.21	11.00	333.90	Dry	0.00	0.00	
11/18/2025	343.00	6.11	11.00	333.90	Dry	0.00	0.00	
12/17/2025	343.00	2.51	11.00	333.90	Dry	0.00	0.00	

Notes:


1. Readings in red are classified as erroneous

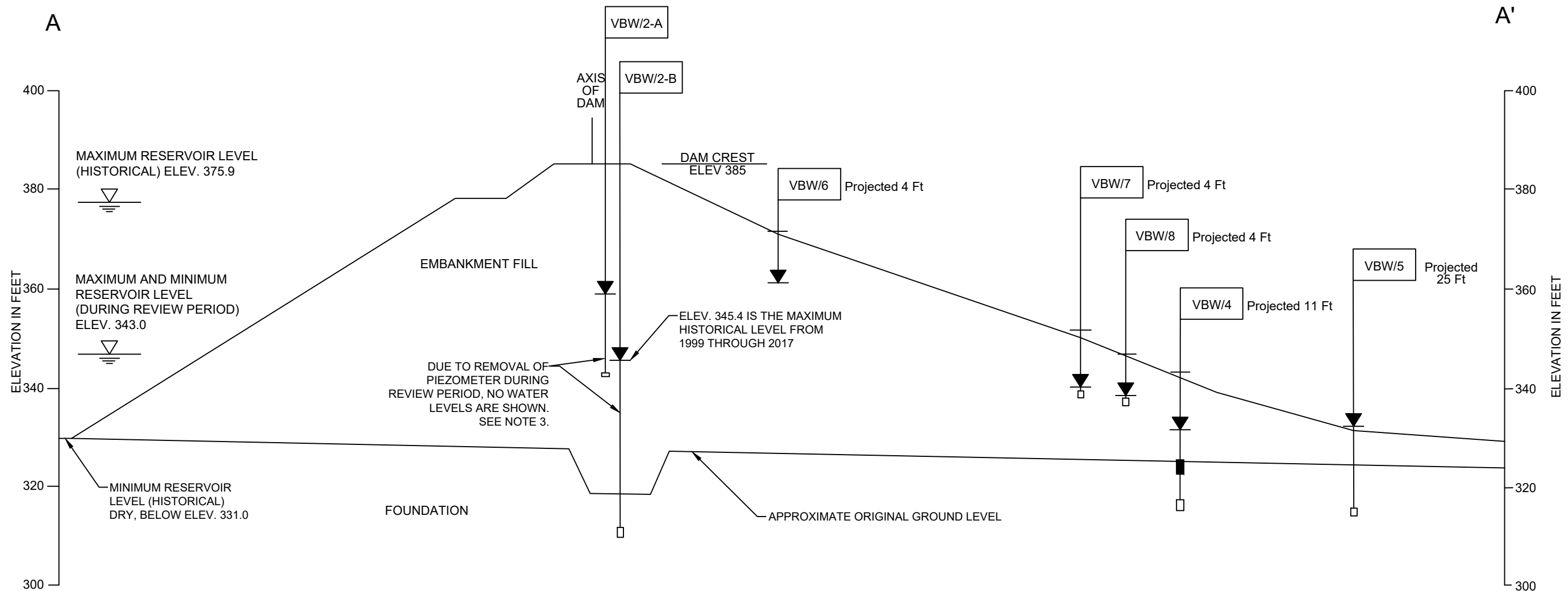
## Figures

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NOT TO SCALE

Annual Surveillance Report from Jan. 2025 to Dec. 2025 Syphon Canyon Dam Irvine, CA		SITE AND INSTRUMENTATION PLAN
Irvine Ranch Water District Irvine, CA	Project 2305575	April 2026 <span style="float: right;">Fig. 1</span>



**LEGEND**

- VBW/4 PIEZOMETER (VIBRATING WIRE PIEZOMETER)
- TOP OF EXTENDED CASING
- SURFACE OF DAM
- MAXIMUM HISTORICAL LEVEL (10YR)
- HIGH RANGE OF MEASURED LEVELS IN PIEZOMETER DURING 12-MONTH REVIEW PERIOD
- LOW
- PIEZOMETER TIP

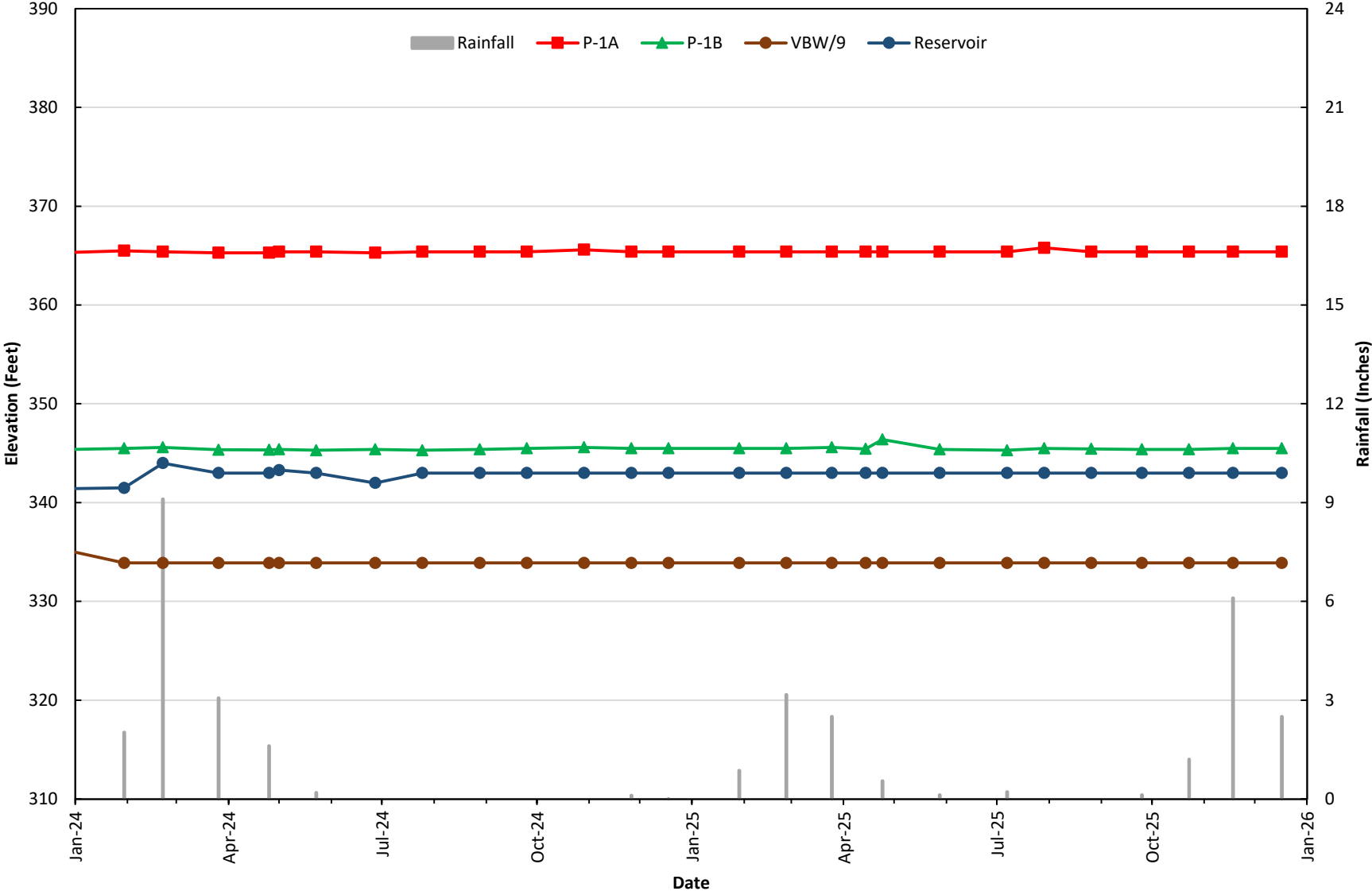
**SECTION A-A' (MAXIMUM SECTION)**

- NOTES:**
- (1) LOCATION OF SECTION A-A' IS SHOWN ON FIGURE 1
  - (2) ELEVATIONS ARE IN FEET RELATIVE TO NGVD29

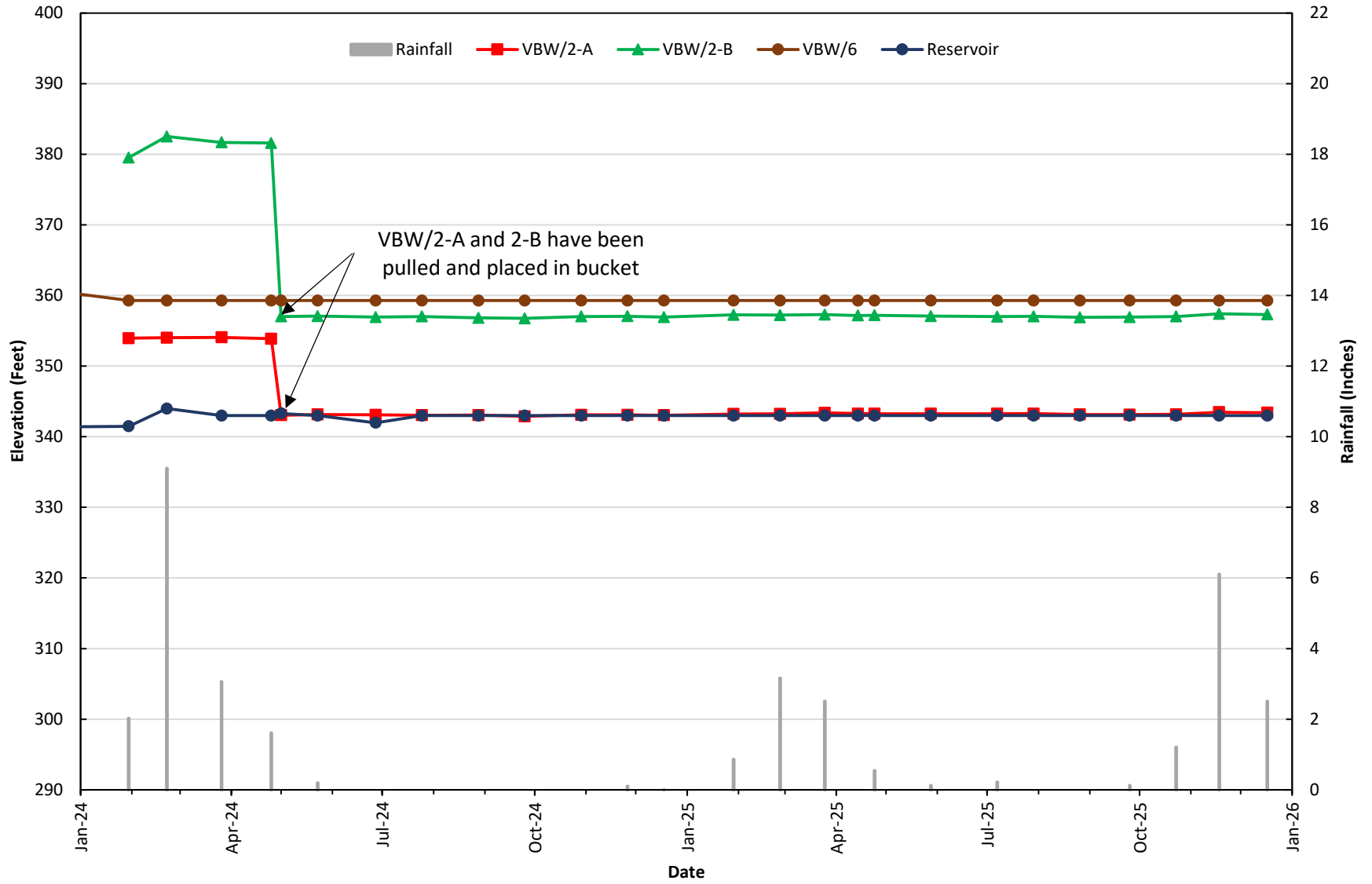
NOT TO SCALE

Annual Surveillance Report from Jan. 2025 to Dec. 2025 Syphon Canyon Dam Irvine, CA		SECTION A-A'
Irvine Ranch Water District Irvine, CA	Project 2305575	April 2026 <span style="float: right;">Fig. 1A</span>

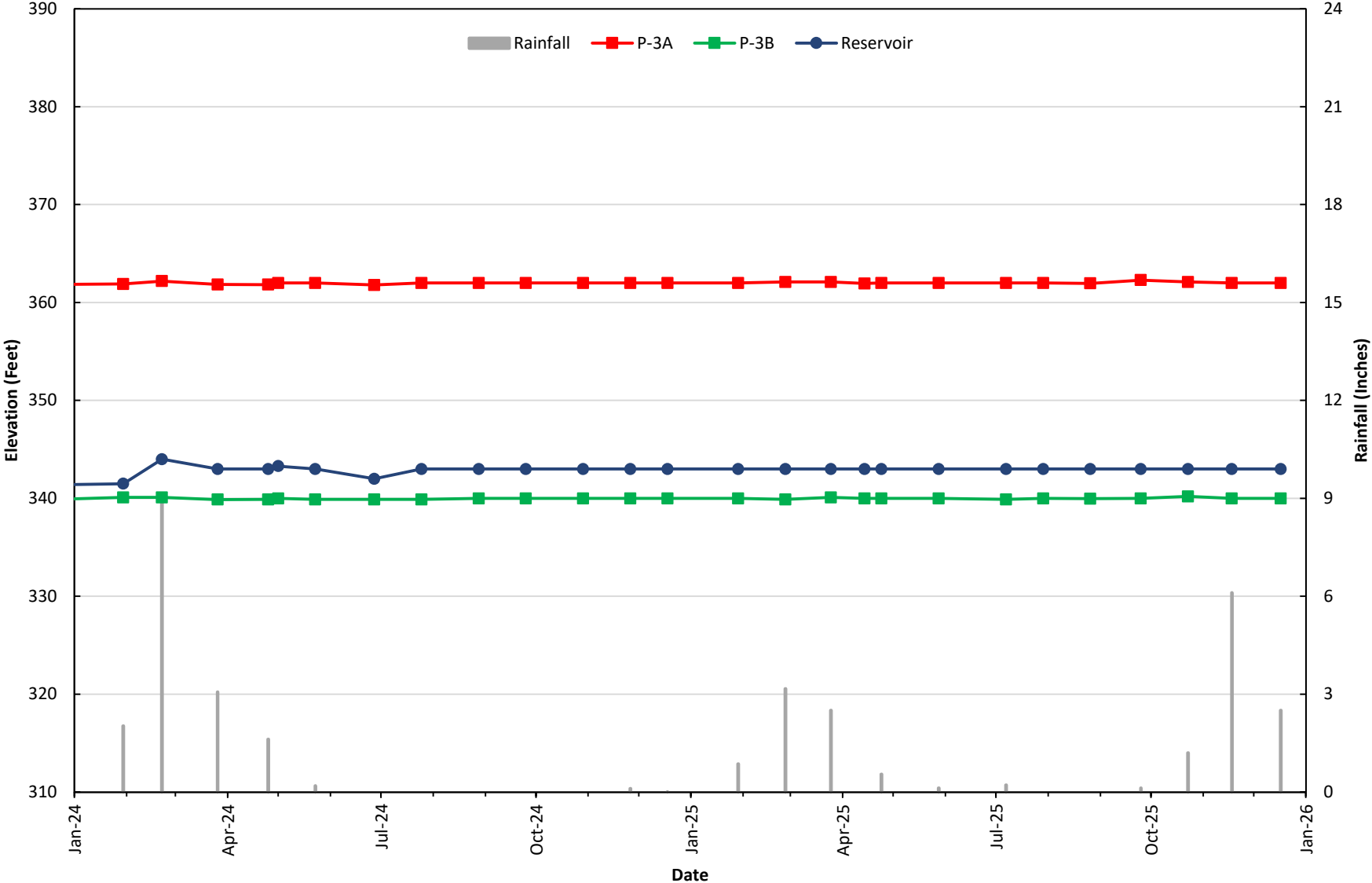
**Figure 2**  
**2-YR OPEN WELL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS**  
**OPEN WELL PIEZOMETERS P-1A, P-1B, AND VBW/9**  
**JANUARY 2024 THROUGH DECEMBER 2025**



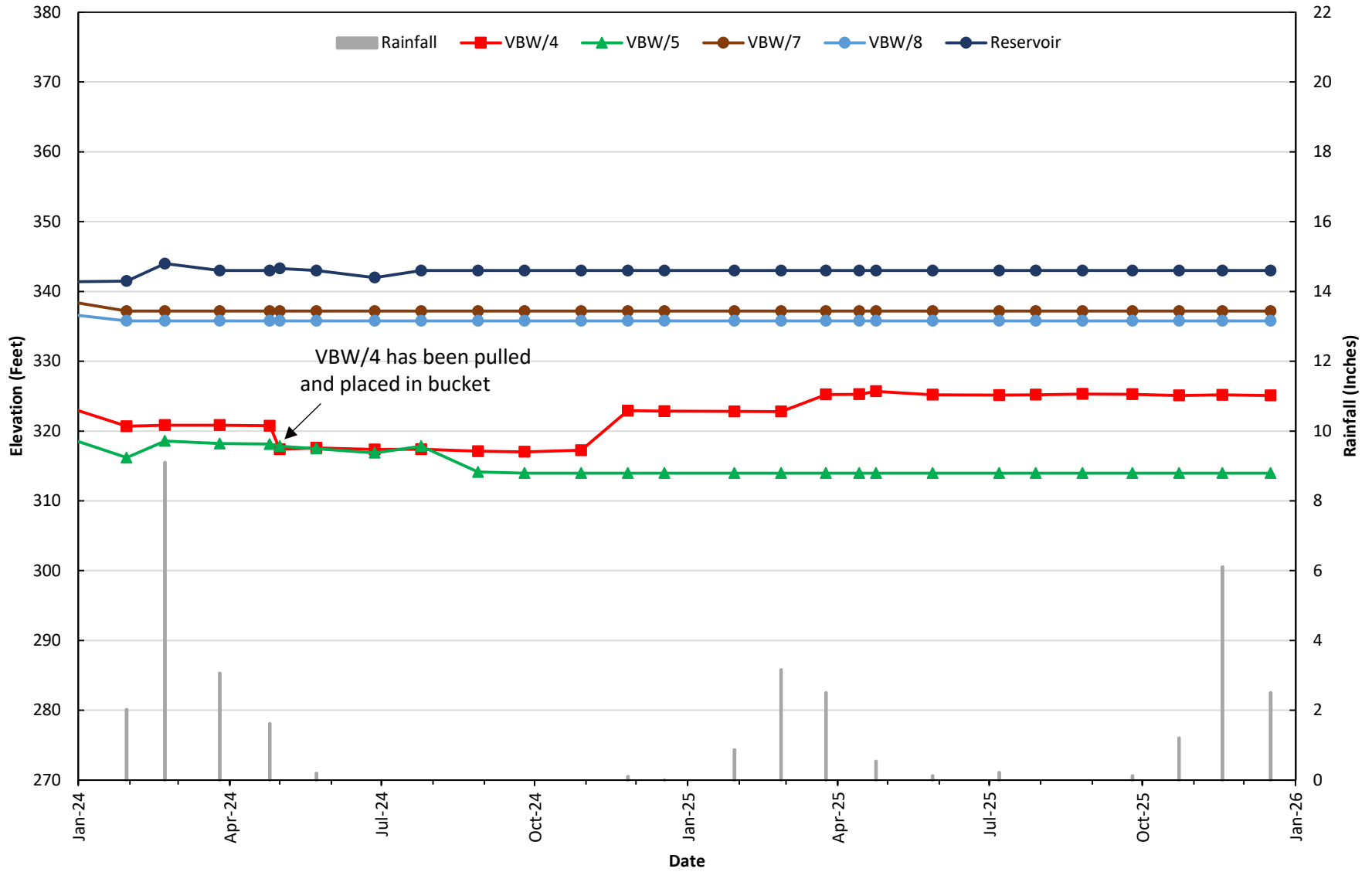
**Figure 3**  
 2-YR VIBRATING WIRE PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS  
 VIBRATING WIRE PIEZOMETERS VBW/2-A, VBW/2-B, AND VBW/6  
 JANUARY 2024 THROUGH DECEMBER 2025



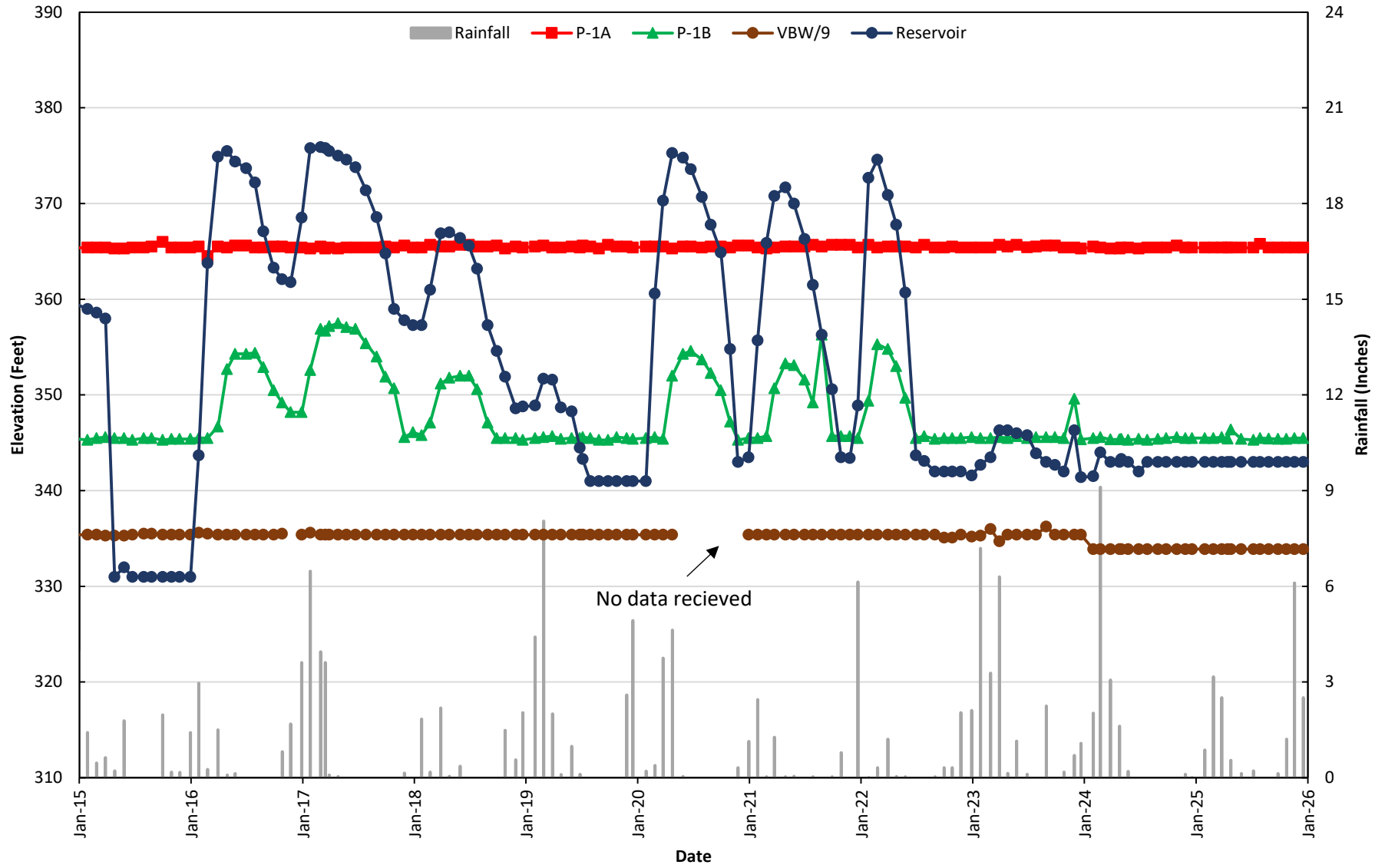
**Figure 4**  
**2-YR OPEN WELL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS**  
**OPEN WELL PIEZOMETERS P-3A AND P-3B**  
**JANUARY 2024 THROUGH DECEMBER 2025**



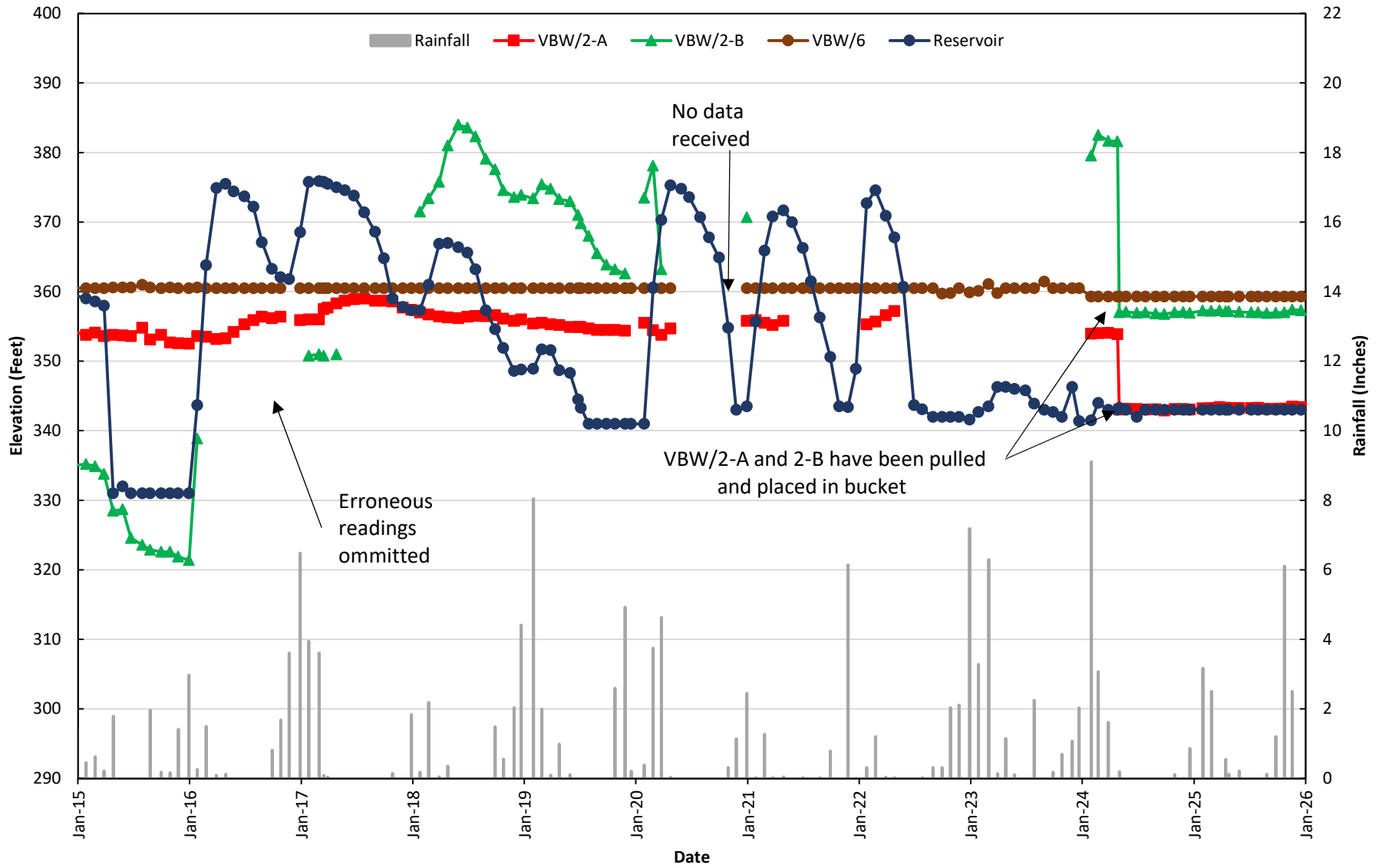
**Figure 5**  
 2-YR VIBRATING WIRE PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS  
 VIBRATING WIRE PIEZOMETERS VBW/4, VBW/5, VBW/7, AND VBW/8  
 JANUARY 2024 THROUGH DECEMBER 2025



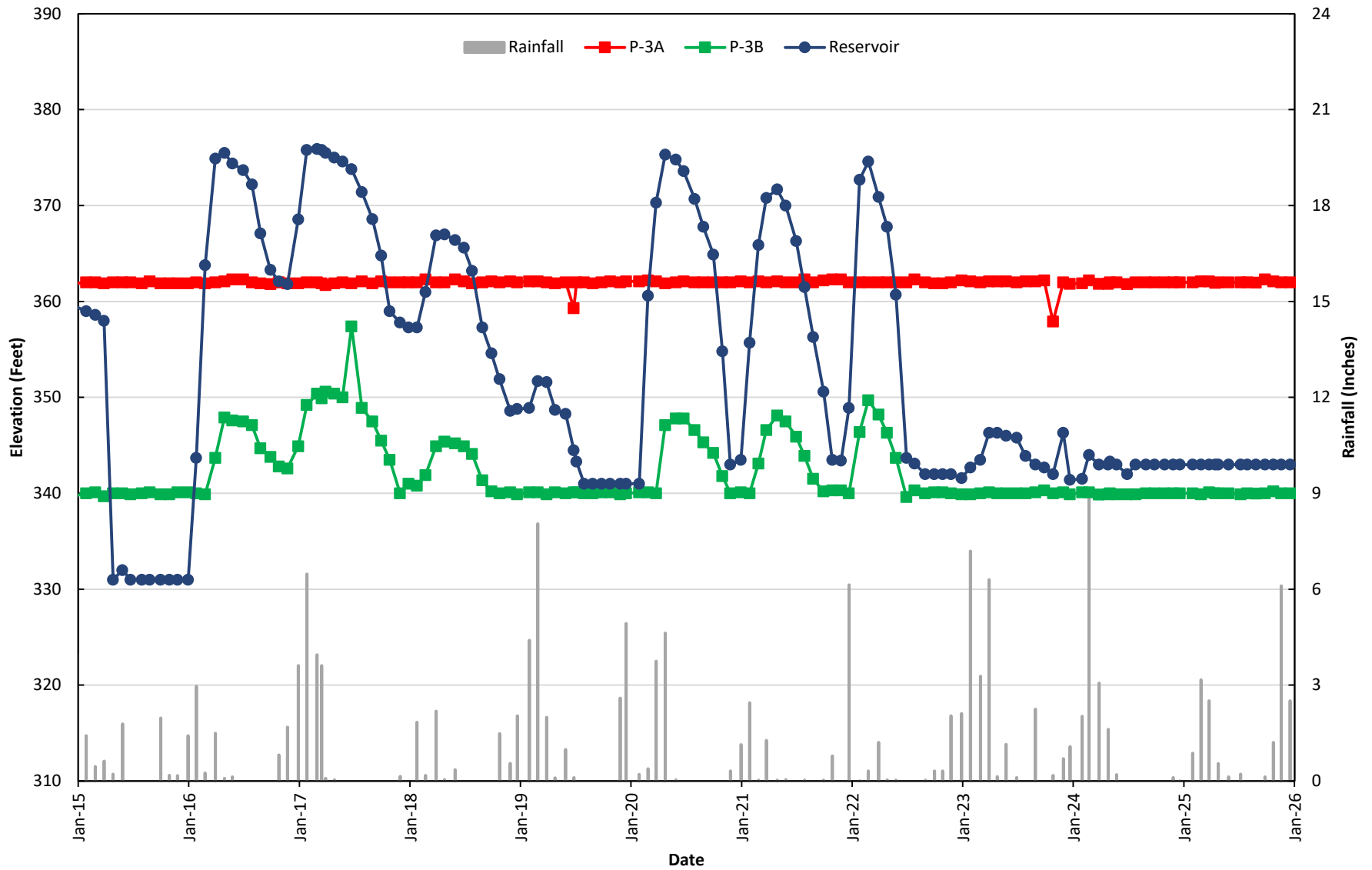
**Figure 6**  
**HISTORICAL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS**  
**PIEZOMETERS P-1A, P-1B, AND VBW/9**  
**JANUARY 2015 THROUGH DECEMBER 2025**



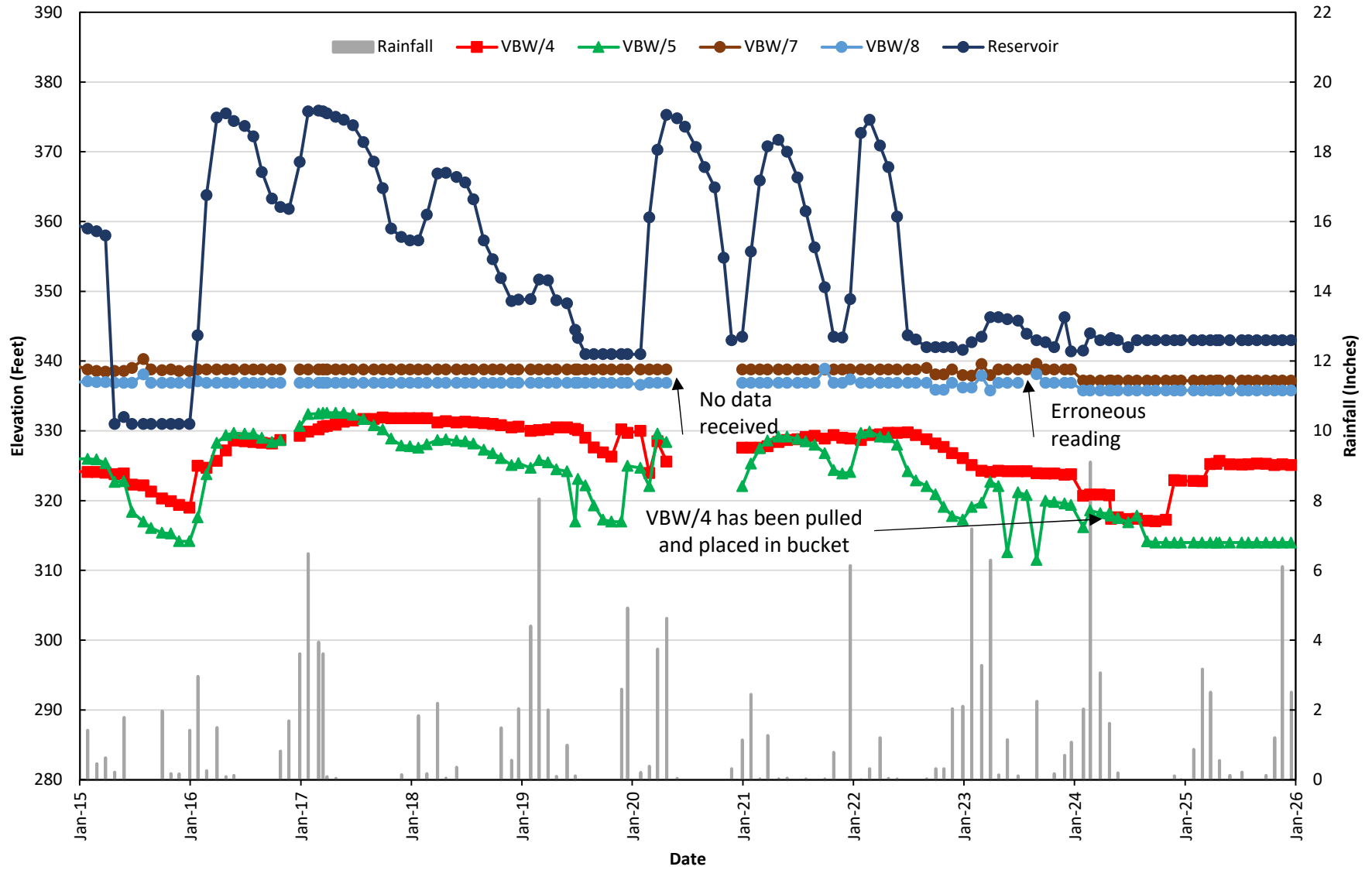
**Figure 7**  
 HISTORICAL VIBRATING WIRE PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS  
 VIBRATING WIRE PIEZOMETERS VBW/2-A, VBW/2-B, AND VBW/6  
 JANUARY 2015 THROUGH DECEMBER 2025



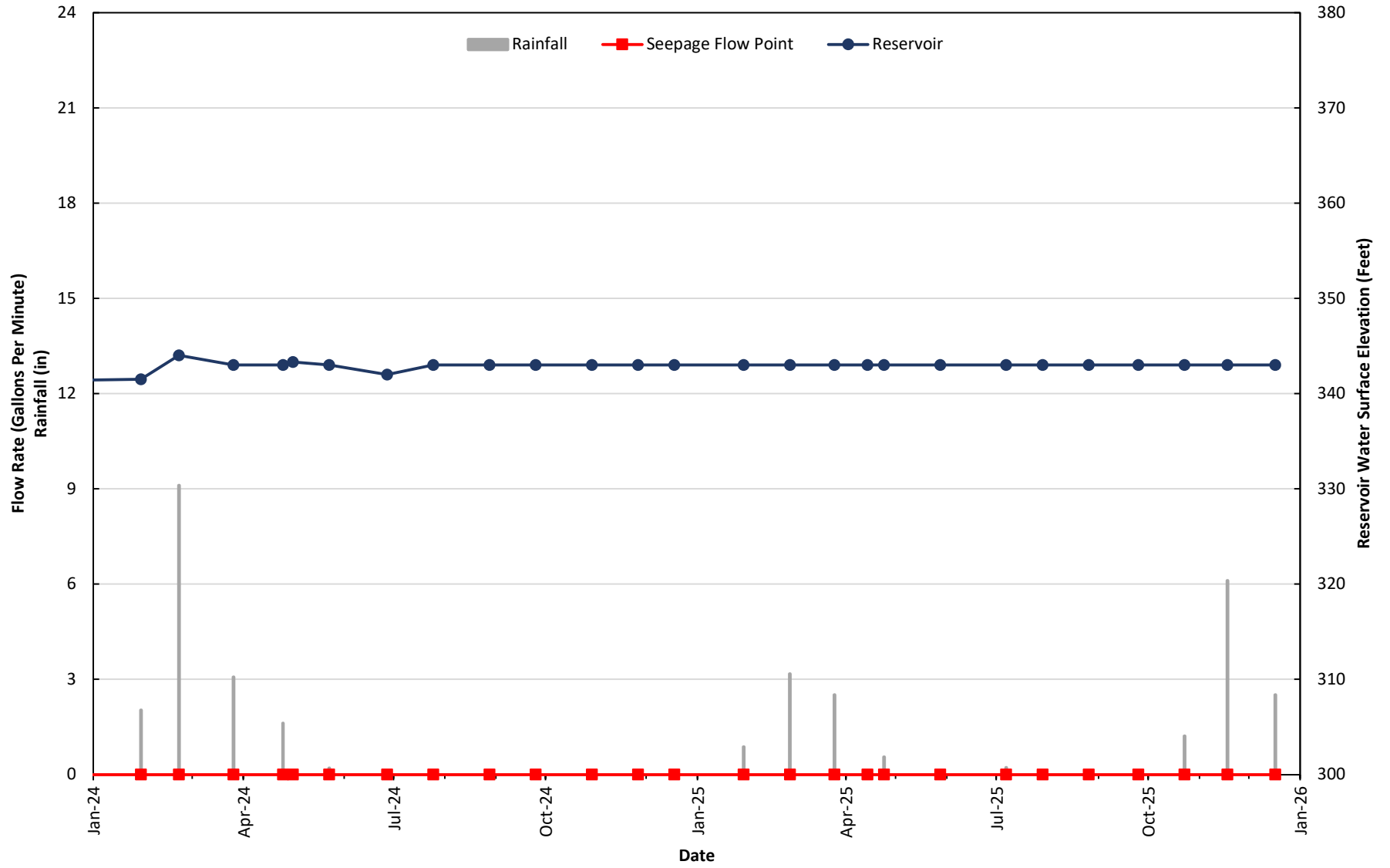
**Figure 8**  
**HISTORICAL PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS**  
**PIEZOMETERS P-3A AND P-3B**  
**JANUARY 2015 THROUGH DECEMBER 2025**



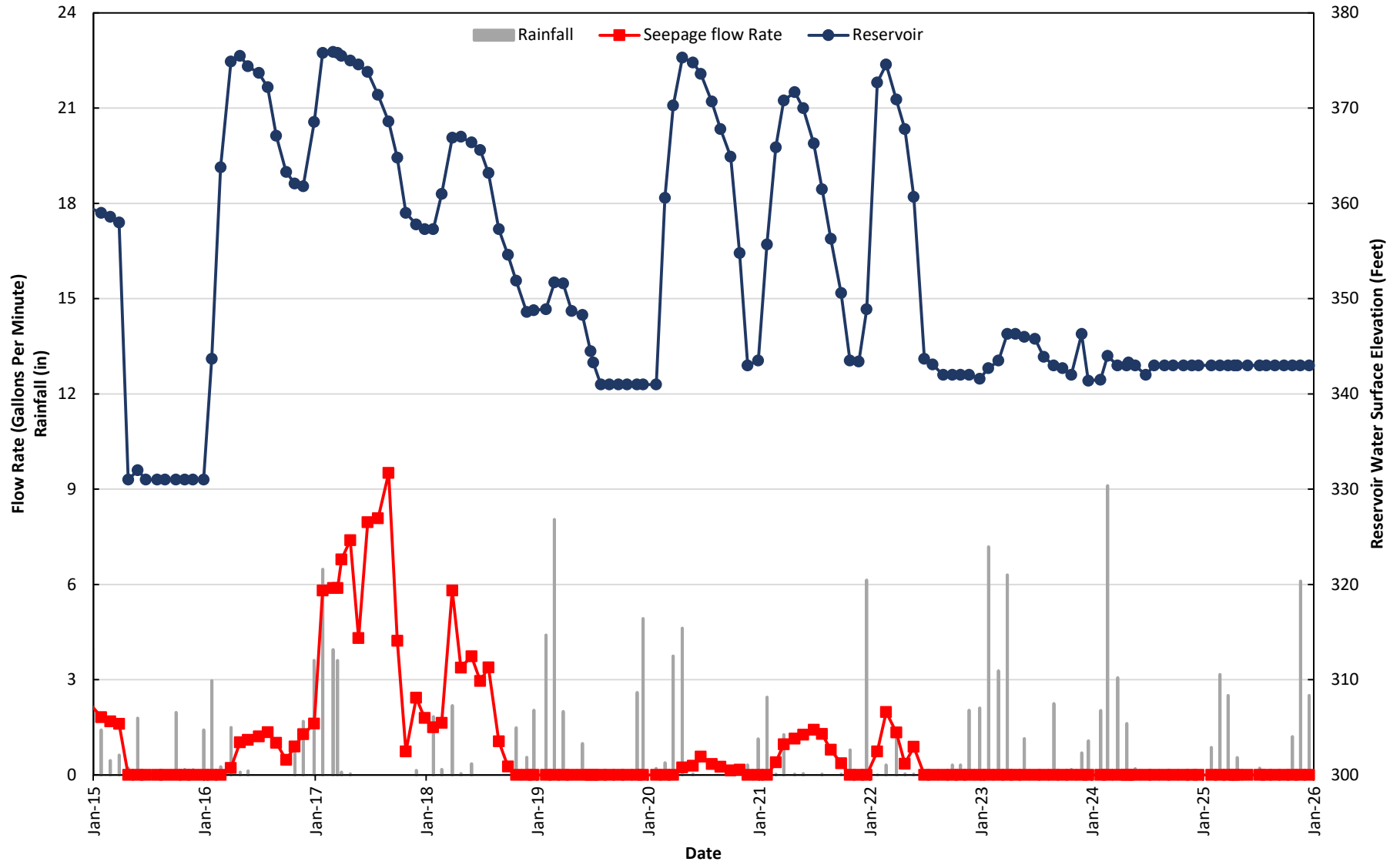
**Figure 9**  
**HISTORICAL VIBRATING WIRE PIEZOMETER AND RESERVOIR WATER SURFACE ELEVATIONS**  
**VIBRATING WIRE PIEZOMETERS VBW/4, VBW/5, VBW/7, AND VBW/8**  
**JANUARY 2015 THROUGH DECEMBER 2025**



**Figure 10**  
**2-YR SEEPAGE, RESERVOIR WATER SURFACE ELEVATIONS, AND RAINFALL**  
**SEEPAGE FLOW POINT**  
**JANUARY 2025 THROUGH DECEMBER 2025**



**Figure 11**  
**HISTORICAL SEEPAGE AND RESERVOIR WATER SURFACE ELEVATIONS**  
**SEEPAGE FLOW POINT**  
**JANUARY 2015 THROUGH DECEMBER 2025**



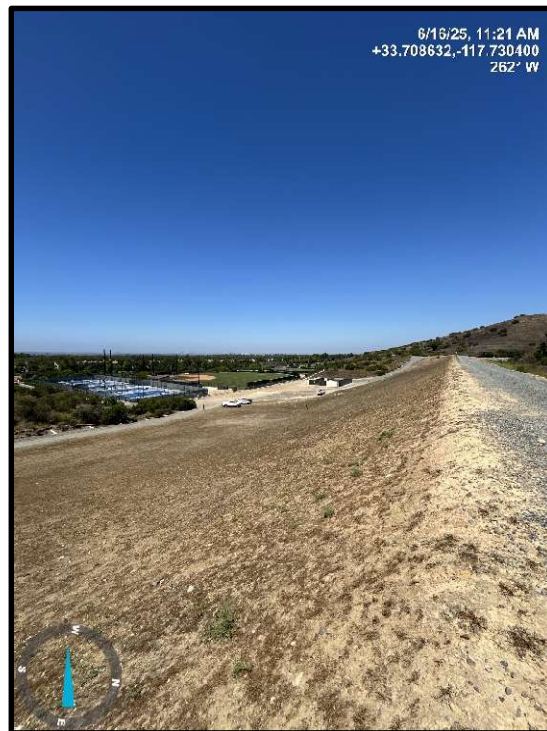
## **Appendix A**

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### **Inspection Photograph Log of Syphon Canyon Dam – June 16, 2025**



**Photo 1)** Upstream face looking towards right abutment showing bench and dry reservoir.



**Photo 2)** Downstream face looking towards right abutment.



**Photo 3)** Crest, upstream face, and downstream face looking towards left abutment.



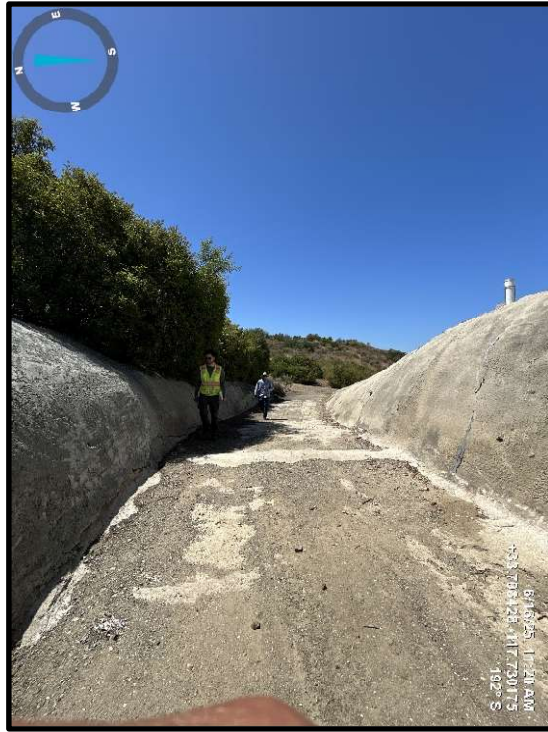
**Photo 4)** Syphon reservoir, outlet works, and reservoir staff gauge.



**Photo 5)** Downstream face looking towards left abutment.



**Photo 6)** Downstream face from toe looking towards left abutment.



**Photo 7)** Spillway approach looking downstream.



**Photo 8)** Spillway channel looking upstream.



**Photo 9)** Drain outfall inside dry seepage vault.

## **Appendix B**

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### **IRWD Dam Outlet Valve Exercising Log**



# IRWD DAM OUTLET VALVE EXERCISING LOG

## SYPHON CANYON DAM VALVE EXERCISING

DATE	INITIALS	12" OUTLET # OF TURNS	DOWNSTREAM MAIN # OF TURNS	BLOW-OFF VALVE	EMERGENCY VALVE FLOW (CFS)	TIME (MIN)	TOTAL GALLONS	REASON	COMMENT
4/10/2013		Exercised	Exercised	Exercised			0		
2014							0	Reservoir empty	Reservoir empty
2015							0	Reservoir empty	Reservoir empty
5/26/2016		36	36	36			0	DSOD	
7/14/2016		36	36	36			0		
4/18/2017		36	36	36			0		
5/2/2018		36	36	36			0	DSOD	
4/1/2019		36	36	36			0		
1/14/2020		36	36	36			0	DSOD	
4/27/2021		36	36	36			0		
4/14/2022		36	36	36			0		
4/19/2023		36	36	36			0	DSOD	
2/25/2025	SH	36	36	36			0	Yearly	Reservoir empty
5/6/2025	SH,AL,NP	Not Turned	Not Turned	Not Turned			0	DSOD	Reservoir empty
							0		
							0		
							0		
							0		