GROUNDWATER MONITORING PROGRAM EARLY WARNING LEVEL ASSESSMENT (2017)

Groundwater Management Program

Prepared by

Cami Apfelbeck
Water Resources Specialist,
M.S. Geological Sciences

Christian Berg
Water Resources Technician
B.A. Environmental Studies

City of Bainbridge Island
Public Works
Water Resources Program

July 2018

Cover photo: Kate Matthews, Water Resources Intern, measuring well water level. Photo taken by Christian Berg, Water Resources Technician, City of Bainbridge Island.

Acknowledgements

The authors would like to thank Charles Krumheuer, City Operations and Maintenance Supervisor, Joel Purdy, Kitsap Public Utility District Groundwater Resource Manager, and Michael Scrafford, Aspect Consulting Associate Analyst/Data Scientist, for technical contribution and data management and assessment assistance.

A special thank you to all the well owners who participate in the monitoring network, allowing a consistent, long-term examination of groundwater status and trends to safeguard the Island's drinking water supply.

Citation

City of Bainbridge Island. 2018. Groundwater Monitoring Program Early Warning Level Assessment (2017). Prepared by Cami Apfelbeck and Christian Berg, Water Resources Program. Bainbridge Island, Washington.

Purpose

This assessment is only a comparison of monitoring data collected over the last ten-year period (2008 -2017) to the Groundwater Management Program's Early Warning Levels (EWLs) for safe yield and seawater intrusion, any exceedances of which trigger follow-up investigation and study. This is not an in-depth hydrogeological assessment of historical trends in water level, quality, and production.

Table of Contents

Figures

Tables

Appendices

1.0 EXECUTIVE SUMMARY

Groundwater is the sole source of drinking water on Bainbridge Island. Primary groundwater-related concerns for the Island are the risk of seawater intrusion (migration of saltwater into the freshwater drinking supply) and pumping rates above the aquifer system's safe yield (amount of water that can be removed from the aquifer system without causing adverse effects).

The City of Bainbridge Island (the city) monitors 86 public and private wells Island-wide from all six aquifers in the Bainbridge Island aquifer system (Figure 1 and Table 1). This assessment is a comparison of monitoring data collected over the last ten-year period (2008 - 2017) to the Early Warning Levels (EWLs) for safe yield and seawater intrusion, any exceedances of which trigger follow-up investigation. The EWLs established for the city's monitoring program are described in Findings, Section 3.0. Refer to Appendix A for a discussion on the purpose and definition of EWLs.

1.1 Water Levels

Over the ten-year assessment period, most water level trends were relatively steady or increasing. Only one well, KPUD's Island Utilities 1, appeared to exceed the safe yield EWL. Water level declines in excess of the safe yield EWL have been noted since the city began assessing water level data from this well (Aspect, 2009; Aspect, 2015; and COBI, 2017).

Though no other wells exceeded the EWL, some individual wells showed slight to moderate water level declines over the last ten years. Continued long-term monitoring in these wells will determine if these declines are due to natural variations in water levels over time or are indicative of a developing problem.

1.2 Chloride

No chloride concentrations measured for the assessment period exceeded the EWL. Nearly all chloride concentrations in each aquifer were relatively low (usually less than 21 mg/L). One residential well located off Crystal Springs Drive had a chloride concentration of 42.30 milligrams per liter (mg/L), slightly higher than average values Island-wide. This well lies along the shoreline within approximately 50 feet of mean high tide, so it is potentially influenced by tides. The concentration has not increased significantly since monitoring began in 2014, but the city will continue to monitor this well for any concerning changes.

1.3 EWL Exceedance Investigation

In 2017, the city completed two investigations of exceedances of EWLs. During last year's early warning level assessment, the city observed a small increasing trend in chloride concentration in the Hidden Cove Utilities Shop well (COBI, 2017). Because the concentration increased over four consecutive wet-season sampling events, this triggered

an EWL response. However, seawater intrusion is highly unlikely as the chloride concentrations were very low (generally less than 7 mg/L) and the increasing trend was only observed during the wet season. Follow up confirmation sampling indicated chloride concentration appeared to be stabilizing in this well. The city will continue to monitor this well.

The city partnered with the Kitsap Public Utility District (KPUD) and the Kitsap Public Health District (KPHD) to investigate historic elevated chloride concentrations in an inactive Seabold Water Association supply well (KPUD, KPHD, and COBI, 2018). A thorough desktop review of historic and current data and a focused field sampling effort in the Seabold area indicated that elevated chloride concentrations were isolated to the well and no other wells appeared to be impacted. Further, there was strong potential that water treatment by-products could have been the source of chloride contamination in the well rather than seawater intrusion. However, seawater intrusion could not be definitively ruled out. Therefore, this well will continue to be monitored. The final report can be found on the investigation project webpage.

In response to Island Utilities Well 1 water level EWL exceedance, KPUD increased monitoring of Island Utilities wells since taking ownership in 2015 to improve the water level and production datasets to help evaluate trends and to design appropriate responsive actions. It should be noted that the long-term record for this well (1987 – 2016) shows a rate of decline significantly less than the current ten-year period, and recent data appear to indicate a rising trend in 2017 relative to the proceeding four years (email from Joel Purdy, KPUD, dated July 19, 2018). It is unknown if this will be a continuing trend, but KPUD will continue to monitor, assess, and take responsive action.

2.0 INTRODUCTION

Groundwater is the sole source of drinking water on Bainbridge Island. Primary groundwater-related concerns for the Island are the risk of seawater intrusion (migration of saltwater into the freshwater drinking supply) and pumping rates above the aquifer system's safe yield (amount of water that can be removed from the aquifer system without causing adverse effects).

2.1 Early Warning Levels (EWLs)

Early Warning Levels (EWLs) are quantifiable measures for initial evaluation of data that provide timely warning of a potentially-developing issue before a problem becomes acute. If an EWL is exceeded, additional investigation is conducted to include problem-specific technical data review and analysis to confirm data validity. Additional sampling and field investigation are performed to confirm a potential problem and, if confirmed, identify the extent and potential causes for the exceedance.

The EWLs established for the city's monitoring program are described in Findings, Section 3.0. Refer to Appendix A for a discussion on the purpose and definition of EWLs.

2.2 The Aquifer System

Bainbridge Island has six principal aquifers (KW/RN, 2000), the extents of which were refined in the U. S. Geological Survey's (USGS) *Conceptual Model and Numerical Simulation of the Groundwater-Flow System of Bainbridge Island, Washington* (Frans et al., 2011).

Perched Aquifer (PA)/Semi-Perched Aquifer (SPA)—The Perched Aquifer is comprised predominantly of Vashon Advance glacial outwash (Qva). The top of the aquifer ranges from sea level to more than 300 feet above mean sea level [ft MSL], with a thickness of 20 to 200 feet. The Semi-Perched Aquifer exists within permeable interbeds (QClpi) of the upper confining unit (QC1). The top of the aquifer ranges from sea level to more than 200 ft MSL, with a thickness of 10 to 50 feet.

Much of the area previously mapped as Semi-Perched Aquifer by Kato and Warren and Robinson and Noble (KW/RN, 2000) was reclassified as Perched Aquifer by the USGS when developing the Bainbridge Island groundwater model (Frans et al., 2011). These aquifers are utilized by predominantly domestic wells, and about 29 percent of wells are completed in these aquifers.

Sea Level Aquifer (SLA)—The Sea Level Aquifer (QA1) is extensive, widely used, and mostly confined by QC1. The top of the aquifer ranges from -200 to 200 ft MSL, with a typical thickness of 25 to 200 feet. About 53 percent of wells are completed in this aquifer.

Glaciomarine Aquifer (GMA)—This aquifer consists of water-bearing units within a thick sequence of fine-grained glaciomarine drift (QA2). The top of the aquifer ranges between more than -500 to -300 ft MSL, with a typical thickness of 20 to 300 feet. Several of

Bainbridge Island's production wells and at least 4 domestic wells are completed in this aquifer, representing about 2 percent of wells.

Fletcher Bay Aquifer (FBA)—This aquifer (QA3) is the deepest identified aquifer on Bainbridge Island. Several large production wells are completed in this aquifer. The top of the aquifer ranges between more than -900 to slightly less than 600 ft MSL, with a typical thickness of 50 to 300 feet. While representing only about 1 percent of wells on Bainbridge Island, the metered KPUD and city wells provide approximately 30 percent of the estimated total Island groundwater production.

Bedrock Aquifer (BED)—Less than 1 percent of the wells are completed in the sedimentary Blakely Harbor and Blakeley formations on the south end of Bainbridge Island which form this aquifer.

Other wells on Bainbridge Island (about 15 percent) are either completed in water bearing zones within confining units or have an indeterminate aquifer completion zone.

2.3 The Monitoring Well Network

The city's monitoring well network includes both public and private wells and is distributed Island-wide across the six Bainbridge Island aquifers (Figure 1). The number of wells in the network may change should well owners choose to drop out of the network or when additional public wells are added to the network when they come under the ownership or management of either the city or KPUD. The current network includes 86 monitoring wells, and their aquifer distribution is as follows: 24 in the Perched and Semi-Perched Aquifers, 43 in the Sea Level Aquifer, six in the Glaciomarine Aquifer, 12 in the Fletcher Bay Aquifer, and one in the Bedrock Aquifer. Wells may be monitored for water level only, chloride only, or both water level and chloride (Table 1).

In assigning wells in the monitoring network to a given aquifer, the determination of the aquifer was made by comparing screen elevation with aquifer elevation and by comparing well location with lateral extent of an aquifer as shown in the 2000 Level II Basin Assessment (KW/RN, 2000) or the *Conceptual Model and Numerical Simulation of the Groundwater-Flow System of Bainbridge Island, Washington* (Frans et al., 2011).

3.0 FINDINGS

3.1 Water Levels

Water levels in a well vary under different conditions. After a pump is turned on to extract water, the water level in the well will began to lower (drawdown). These are "pumping" water levels. After the pump is turned off, the water level in the well will begin to rise or recover. These levels are "rising" or "recovery" levels. Pumping in a nearby well in the same aquifer can cause drawdown and recovery effects as well. Once the pump is turned off and water level has returned to its original position and remains steady, it is considered static. This level is called the "static" water level.

Water professionals collect different types of water level data for specific purposes. Well drillers collect water levels under all conditions to assess viability of the well (can it produce good-quality water at a rate sufficient to supply the demand). Production wells are routinely monitored throughout varying pumping conditions and recovery periods to assess well/pump capacity and performance, assess aquifer response, and manage distribution.

Water resources managers collect *static water levels* for groundwater status and long-term trend analysis. As part of the data quality validation process for this assessment, all water level data were thoroughly examined to isolate static water levels from all other water level measurements. Any non-static water level data or data determined to be invalid due to faulty measurement method or instrumentation were removed from the data set before trend assessment and comparison to the EWL.

The city's Groundwater Monitoring Program defines the aquifer safe yield EWL as *a declining rate of ½ foot or more per year over a ten-year period that cannot be explained by variations in precipitation* (Aspect, 2009). As the EWL examines a ten-year period, calculations were only applied to wells that had at least eight years of data in the last ten years (2008 – 2017). Water level trend calculations were based on an ordinary least squares fit to monthly averages of all static water level data.

It is important to note that reviewing data sets over a constrained period of time such as the ten-year period specified in the safe yield EWL can be useful, but it has some limitations. One significant limitation is that it isolates the current ten-year period from the longer, historical record, where such exists. The historical record could reveal that the current increasing or declining trend may be part of a natural, long-term fluctuation in water level and not the result of exceeding safe yield. It is important to consider the long-term record of all water levels, where such exists, when conducting follow up investigation.

To determine variations in precipitation, the city used a Cumulative Departure Precipitation (CDP) curve which represents the running total of differences between monthly rainfall and the average rainfall over the ten-year assessment period. Downward

trends in the CDP indicate periods of below average precipitation and upward trends indicate periods of above average precipitation. Groundwater levels naturally rise during above average precipitation and fall during below average precipitation. Therefore, under natural conditions, well water levels should be rising and falling similarly to the CDP curve. For this comparison, the CDP curve is plotted along with each well's hydrograph (water level data plot) in Appendix B.

Most water level trends were relatively steady or increasing. However, one well appeared to exceed the safe yield EWL. Water level declines in excess of the safe yield EWL have been noted in Island Utilities Well 1 since the city began assessing water level data from this well (Aspect, 2009; Aspect, 2015; and COBI, 2017). Though no other wells exceeded the EWL, some individual wells showed slight to moderate water level declines over the last ten years. To determine if these are representative of a developing problem rather than natural variations in water levels over time, these wells warrant continued monitoring and assessment.

Observations for each aquifer are discussed in further detail below and are shown in individual well hydrographs in Appendix B and by aquifer in Figures 2 through 10.

3.1.1 Perched and Semi-Perched Aquifers

Twenty-three of the 24 wells monitored in the Perched and Semi-Perched Aquifers were monitored for water level. No wells in these aquifers exceeded the safe yield EWL. All wells had increasing water level trends ranging from 0.03 to 0.75 feet per year over the last ten years, and water level trends in these aquifers showed a strong correlation with rainfall both seasonally and long-term, consistent with the CDP curve.

The city ceased monitoring in the High School/Commodore well in 2015 due to a faulty downhole pressure transducer and lack of resources. Therefore, there were insufficient data over the last ten year period to calculate a meaningful trend for this well as part of this assessment. Monitoring is tentatively scheduled to recommence in this well in 2018.

3.1.2 Sea Level Aquifer

Thirty-five of the 43 wells monitored in the Sea Level Aquifer were monitored for water level. No wells in this aquifer exceeded the safe yield EWL. One well had a stable trend (0.0 feet per year over the last ten years), and 21 wells had increasing water level trends ranging from 0.01 to 0.52 feet per year over the last ten years. Seven wells had declining trends ranging from -0.02 (negligible) to -0.45 feet per year in the last ten-year period.

KPUD's North Bainbridge Well 06 (25N/02E-09K02) demonstrated a declining trend of -0.02 feet per year over the last ten years. This is neglible, and co-located wells in the same aquifer (North Bainbridge Wells 03 and 07) have increasing trends of 0.09 and 0.07, respectively. Therefore, North Bainbridge Well 06 is not a concern at this time.

Water level in two private exempt wells had apparent declining trends. The first private exempt well (26N/02E-34R01) located off Spargur Loop Road NE declined 0.13 feet per year over the last ten years. This well will continue to be monitored for long-term trend.

The second private exempt well (25N/02E-21P03) located off NE High School Rd and Fletcher Road NE was measured using two different measurement methods during the assessment period which may have an influence on trend calculations. Measurement method in the well changed twice from steel tape to sonic water level meter, then back to steel tape. This was first reported in 2015 (Aspect, 2015) and subsequently in 2017 (COBI, 2017). The sonic level measurements, which tend to be less precise, were removed from the record which left a significant gap in the data record. The water level trend in this well has improved (-0.42 feet per year in last year's assessment to -0.36 feet per year in this assessment period). Continued monitoring of this well consistently using the steel tape method, as planned, will determine if this trend continues over time.

The Bainbridge Island Landfill well (25N/02E-33C) water level trend was -0.31 feet per year over the last ten years. City staff are investigating water use on the site and production from a nearby public water system to determine possible influences on water level in this well. Continued monitoring is warranted.

Two KPUD public water system wells also had declining trends that, although don't exceed the safe yield EWL, warrant continued monitoring and assessment. The Harbor Crest well (25N/02E-34C03), located near the southern Eagle Harbor shoreline, had an apparent declining water level trend of -0.3 feet per year over this assessment period. This is an improvement over last year's trend of -0.41 feet per year. The second well, the Island Utilities Monitoring Well (25N/02E-34F06), also located south of Eagle Harbor, had an apparent declining water level of -0.32 feet per year over the last ten year period. KPUD will continue to monitor both of these wells for long-term trends.

Wing Point COBI (25N/02E-26B01), one of two wells located on the Wing Point Golf Course, had a declining trend of -0.45 feet per year over the last ten years. As reported in last year's assessment, it is likely some of the water levels reported were levels under the influence of pumping from the second well to support irrigation. This well will continue to be monitored closely.

The three wells currently monitored for water level in the city's Head of the Bay wellfield (2, 3, and 5) began water level monitoring in 2013. Three KPUD South Bainbridge Island wells (7, 8, and 9) began water level monitoring in 2015 and 2016. These wells have less than eight years of data in the last ten year period, so meaningful trends could not be calculated as part of this assessment.

3.1.3 Glaciomarine Aquifer

Five of the six wells monitored in the Glaciomarine Aquifer were monitored for water level. No water level trends in this aquifer exceeded the safe yield EWL. Only one well, a private exempt well (25N/02E-29P01) located off Crystal Springs Drive, showed a declining trend of -0.22 feet per year over the last ten year period. Though this well did not exceed the

EWL, it bears continued monitoring. The well lies near the shoreline within 50 feet of the mean high tide line, and the water level has been observed to fluctuate with the tides. Tidal elevation is tracked along with water levels to observe any apparent correlation that may be confounding water level trend calculations.

All other wells had increasing water level trends ranging from 0.01 to 0.36 feet per year over the last ten years.

3.1.4 Fletcher Bay Aquifer

Eleven of the 12 wells monitored in the Fletcher Bay Aquifer were monitored for water level. Five wells had increasing water level trends ranging from 0.1 to 0.45 feet per year over the last ten years. Four wells had declining trends ranging from -0.06 (negligible) to -1.16 feet per year in the last ten-year period. Two KPUD Island Utilities wells (2 and 3) began water level monitoring in 2015. These wells have less than eight years of data in the last ten year period, so meaningful trends could not be calculated as part of this assessment.

Meigs Farm Well (25N/02E-15J02) demonstrated a negligle declining trend of -0.06 feet per year over the last ten years.

KPUD's North Bainbridge Well 09 (25N/02E–096G04) had a declining trend of -0.25 feet per year over the last ten years, an improvement over last year's -0.4 feet per year. Previous assessments indicated that this well exhibited water level drops when it first went into production in 1994 (Aspect, 2009), but exhibited relatively stable water levels in more recent years (Aspect, 2015).

Sands Road 2 (25N/02E-21J07) showed a declining trend of -0.14 feet per year over the last ten years. However, co-located Sand Road 1 in the same aquifer had an increasing trend of 0.45 feet per year.

The only well to exceed the safe yield EWL was KPUD's Island Utilities Well 1 (25N/02E-34F07). The current ten-year trend is -1.16 feet per year. It should be noted that the long-term record for this well (1987 – 2016) shows a rate of decline significantly less than the current ten-year period, and recent data appear to indicate a rising trend in 2017 relative to the proceeding four years (email from Joel Purdy, KPUD, dated July 19, 2018). See Section 4.3 for further discussion regarding this well.

3.1.5 Bedrock Aquifer

As water level fluctuations in a bedrock aquifer are driven by more complicated geology than that found in typical sand and gravel aquifers like the other Bainbridge Island aquifers, applying the safe yield EWL to this aquifer may not be an appropriate application of the EWL. Only one well in this aquifer is monitored for water level, and the trend for this well did not exceed the safe yield EWL.

3.2 Chloride

Chloride concentration in groundwater is the most common indicator used to assess saltwater intrusion which is the migration of saltwater into freshwater drinking supplies. For land masses surrounded by marine water like Bainbridge Island this process is called seawater intrusion. Intrusion along the shoreline can be a natural phenomenon, but it can also be caused by overpumping of groundwater which pulls the saltwater into the well or aquifer.

The city's Groundwater Monitoring Program defines the seawater intrusion EWL as *a chloride concentration at or above 100 mg/L or any increasing trend in chloride concentration* (Aspect, 2009). The 100 mg/L level is based on Washington State Deparment of Ecology's draft Seawater Intrusion Policy (DOE, 1990).

A determination of an increasing trend requires at least four consecutive samples or samples taken over at least a one-year period with seasonality taken into account. Chloride concentration can vary between the wet season and the dry season. Therefore, to take seasonality into account, the city separated chloride data by season before comparing concentration trends to the EWL (Figure 11).

Similar to the safe yield EWL asssessment, this approach to chloride concentration assessment can come with some limitations. For example, small increases in chloride concentration over four years may exceed the EWL, but the longer-term record may show that this fluctuation is part of the natural behavior in that well. It is important to consider the longer-term record, where such exists, when conducting follow up investigation.

As part of the data quality validation process, all unusual data values that appeared to fall outside of the norm were thoroughly investigated. All data identified as either outliers (meaning all concentrations before and after were significantly different) or invalid due to faulty sampling or analysis method were removed from the data set before comparison to the EWL. Chloride concentrations are plotted on the well hydrographs in Appendix B for wells in which chloride is monitored.

No chloride concentrations measured for this assessment period exceeded the EWL. Chloride concentrations in all aquifers were low (usually less than 21 mg/L).

For most private exempt wells, there is a small jump in chloride concentration (1-4 mg/L) between the 2007/2008 data collected by the USGS and the city's data beginning in 2012. As this jump was observed in most of the private well data across all aquifers, it was suspected that it was caused by a difference in analytical method rather than an actual increase in chloride concentrations. Lonna Frans, USGS, confirmed that the USGS used field test kits for the 2008 data rather than laboratory analysis which is the city's preferred method (email dtd May 16, 2017). Therefore, the general increase between the 2008 data and 2012 data is not considered an increase for EWL assessment.

3.2.1 Perched and Semi-Perched Aquifers

Nine wells in the Perched and Semi-Perched Aquifers were monitored for chloride. In 2017, chloride concentrations ranged from 2.86 mg/L to 9.90 mg/L, and no wells in these aquifers exceeded the EWL.

3.2.2 Sea Level Aquifer

In 2017, 29 wells in the Sea Level Aquifer were monitored for chloride. Chloride concentrations ranged from 2.07 mg/L to 16.80 mg/L, and no wells in this aquifer exceeded the EWL.

3.2.3 Glaciomarine Aquifer

In 2017, five wells in the Glaciomarine Aquifer were monitored for chloride, none of which exceeded the EWL. Chloride concentrations ranged from 2.49 mg/L to 6.76 mg/L for all but one well. A private well (25N/02E-29P01) located off Crystal Springs Drive had a chloride concentration of 42.30 mg/L. The well lies on the shoreline within 50 feet of the mean high tide line. Some correlation between water level and tidal elevation has been observed, so there is potential for chloride concentration to be influenced by tides.

3.2.4 Fletcher Bay Aquifer

In 2017, six wells in the Fletcher Bay Aquifer were monitored for chloride, none of which exceeded the EWL. Chloride concentrations ranged from 2.57 mg/L to 9.83 mg/L.

3.2.5 Bedrock Aquifer

Seawater intrusion is generally not a concern for bedrock aquifers. Therefore, the city does not monitor any wells in this aquifer for chloride.

4.0 CONFIRMATION SAMPLING AND INVESTIGATION

In accordance with Groundwater Management Program guidance, an exceedance of an EWL would result in one or both of the following management responses: (1) additional investigations in order to determine if a potential problem is developing, and (2) protective or remedial actions where appropriate. Possible investigations could include additional data evaluation, expanded monitoring, problem specific technical review and analysis, or modeling. Possible actions may include water conservation, limitations on new wells, or development of alternate water supplies (Aspect, 2009).

This section is a discussion of additional investigation completed in 2017 or in progress at the time of this reporting, in response to observed EWL exceedances.

4.1 Seabold Area

In 2006, chloride concentration in the Seabold Water Association drinking water supply well exceeded the city's early warning level for potential seawater intrusion. The city, KPUD, and KPHD conducted an investigation to determine if elevated chloride was a regional issue and if the elevated chloride was due to seawater intrusion or a local point source of contamination (KPUD, KPHD, and COBI, 2018).

Results indicated that elevated chloride concentration was localized to the Seabold well and not a regional problem. There appeared to be no impacts to nearby wells.

Seawater intrusion of the Seabold well is unlikely, but it cannot be completely ruled out. Well water chemistry showed evidence of groundwater and saltwater interaction. However, by-products from the treatment of hardness, iron, and manganese are a potential source for chloride contamination in this well and could explain the rapid increase in chloride concentration (7.8 mg/L in 1998 to 1,300 mg/L in 2017) despite so little water use (this well has not been used other than to collect periodic water samples since the water system drilled a deeper well in 2007).

Northwest Water Systems and the city continue to monitor water level and chloride in the Seabold well. If chloride concentrations decline with time, it may be evidence that historic pumping of the well caused seawater intrusion. If chloride concentrations increase with time, a local point source of contamination may be the cause.

4.2 Hidden Cove Utilities Shop Well

In response to increasing chloride concentrations in the Hidden Cove Utilities Shop well that triggered an EWL response in the previous assessment, the city conducted follow up confirmation sampling in 2017. The Hidden Cove Utilities Shop well provides water to the

city's Operations and Maintenance facilities located off the southwest corner of the Hidden Cove Road/Hwy 305 interchange. The threat of seawater intrusion is usually greatest during the dry season when water use is high and groundwater levels are at their lowest. However, the seawater intrusion EWL was only exceeded by wet season samples from this well and the values were extremely low (<7mg/L), so it is likely that onsite processes such as septic system influence, or runoff from materials stockpiles or vehicle washing may be responsible for the slight increase rather than seawater intrusion.

Follow up confirmation sampling indicated chloride concentration appeared to be stabilizing in this well. The city will continue to monitor this well and evaluate the site for potential sources of chloride.

4.3 Island Utilities Well 1

Water level declines in excess of the safe yield EWL have been noted since the city began assessing water level data from this well (Aspect, 2009; Aspect, 2015; and COBI, 2017). KPUD increased monitoring of the four Island Utilities wells since taking ownership in 2015 to build water level and production data sets to allow staff to better discern local cause and effect and to design appropriate responsive actions.

KPUD Groundwater Resource Manager, Joel Purdy, reported that over the long-term record for this well from 1987 to 2016, the rate of decline was significantly less at approximately -0.6 feet per year (email dated July 19, 2018). Additionally, more recent data appear to indicate a rising trend in 2017 relative to the proceeding four years (2013-2016). It is unknown if this will be a continuing trend, but KPUD will continue to monitor, assess, and take responsive action.

5.0 REFERENCES

Aspect Consulting, LLC (Aspect). 2009. Groundwater Monitoring Program Update, Bainbridge Island, Washington.

Aspect Consulting, LLC (Aspect). 2015. Hydrogeological Assessment of Groundwater Quantity, Quality, and Production, Bainbridge Island, Washington.

City of Bainbridge Island (COBI). 2017. Groundwater Monitoring Program Early Warning Level Assessment (2016). Prepared by Cami Apfelbeck and Christian Berg, Water Resources Program. Bainbridge Island, Washington.

Frans, L.M., Bachmann, M.P., Sumioka, S.S., and Olsen, T.D. (Frans et al.). 2011. Conceptual Model and Numerical Simulation of the Groundwater-Flow System of Bainbridge Island, Washington, Scientific Investigations Report 2011-5021, U.S. Geological Survey, Reston, Virginia.

Kato and Warren, Inc., and Robinson and Noble, Inc. (KW/RN). 2000. City of Bainbridge Island Level II Assessment-An Element of the Water Resources Study, Bainbridge Island, Washington.

Kitsap Public Utility District, Kitsap Public Health District, and City of Bainbridge Island (KPUD, KPHD, and COBI). 2018. Seabold Potential Seawater Intrusion Investigation, Bainbridge Island, Washington.

Washington State Department of Ecology (Ecology). 1990. Draft Seawater IntrusionPolicy, Olympia, Washington.

Figures

Figure 1. **Monitoring Well Network**

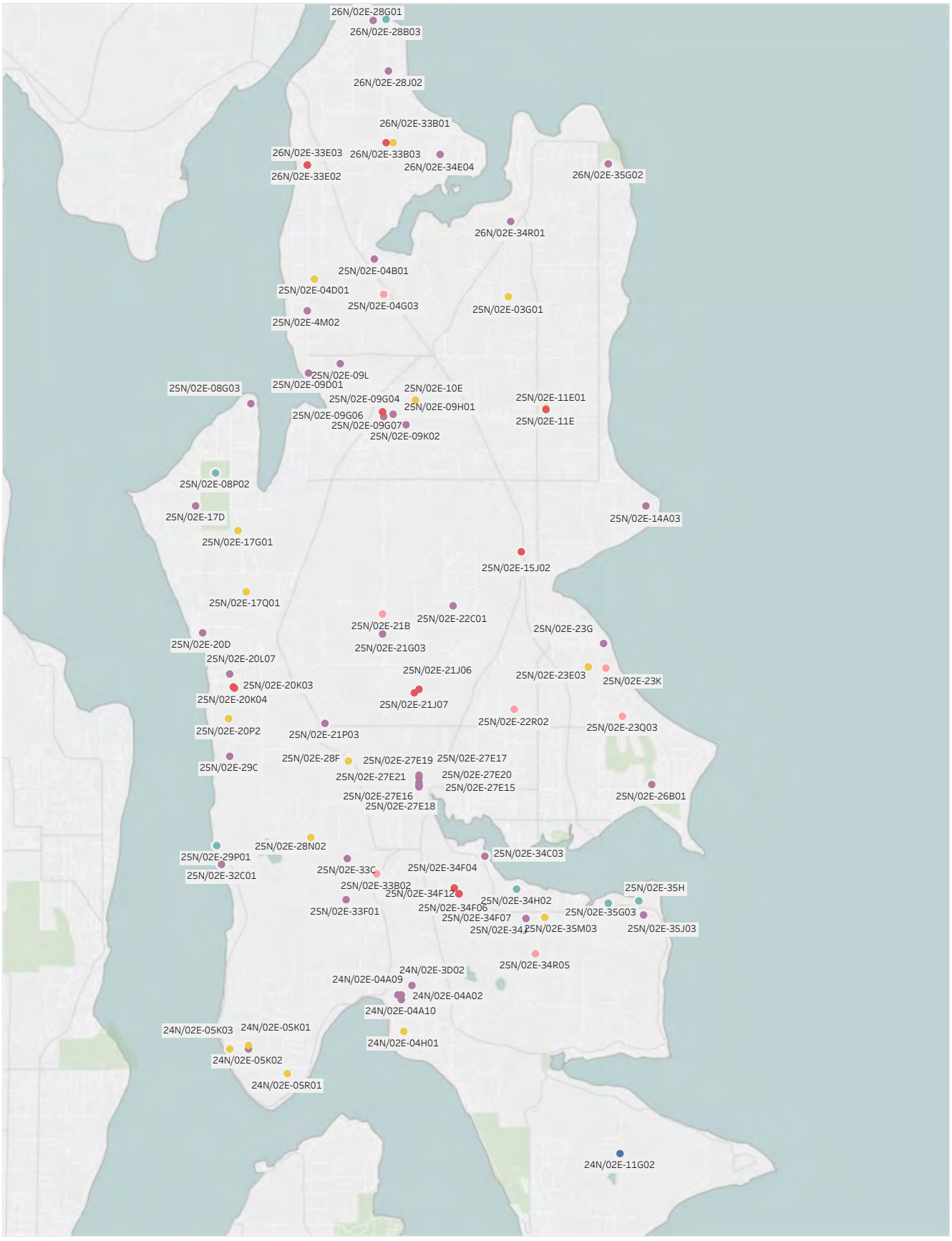


Figure 2. **Perched Aquifer,** Static Water Level

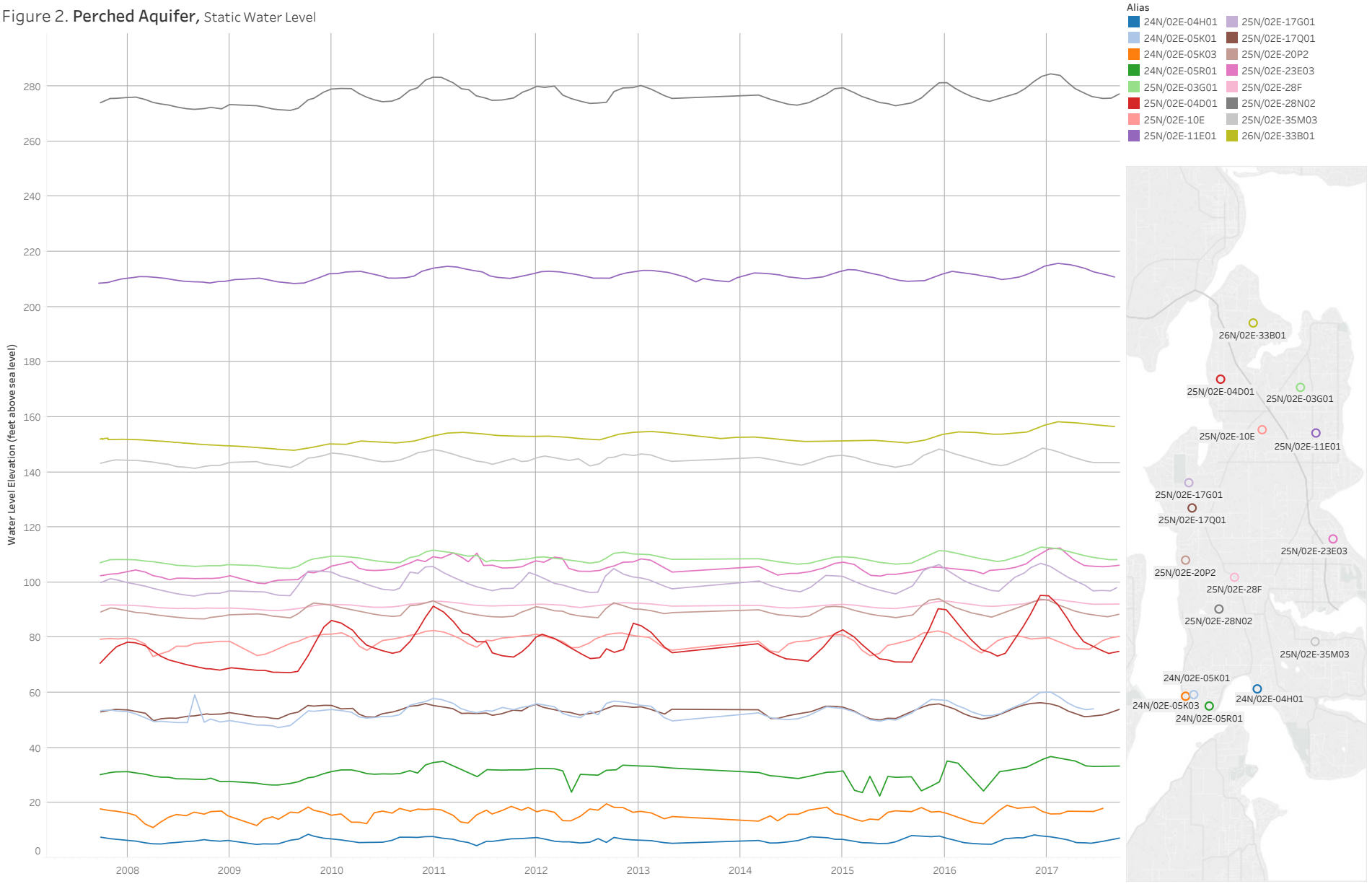


Figure 3. **Semi-Perched Aquifer,** Static Water Level

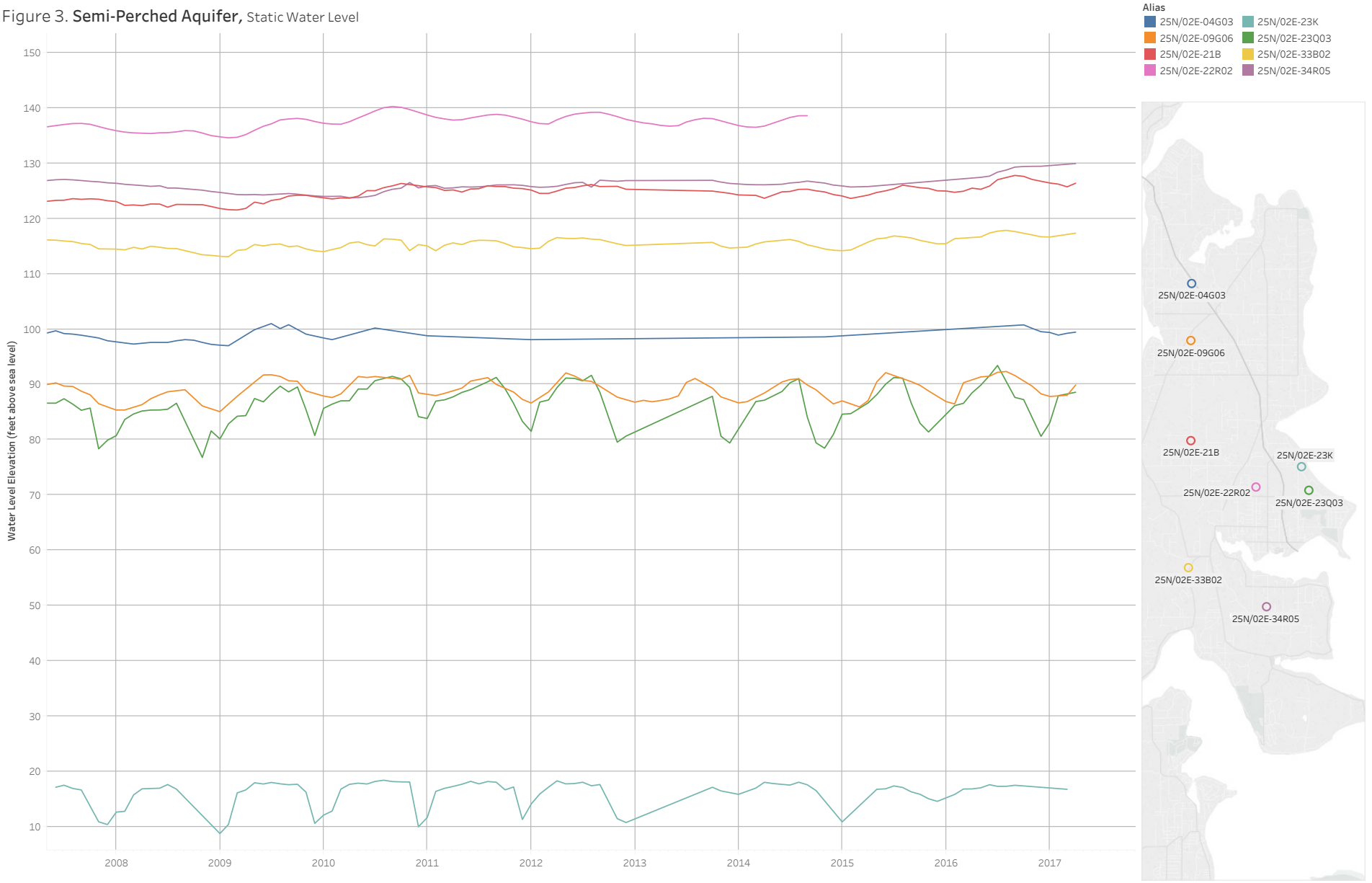


Figure 4. **Sea Level Aquifer North,** Static Water Level

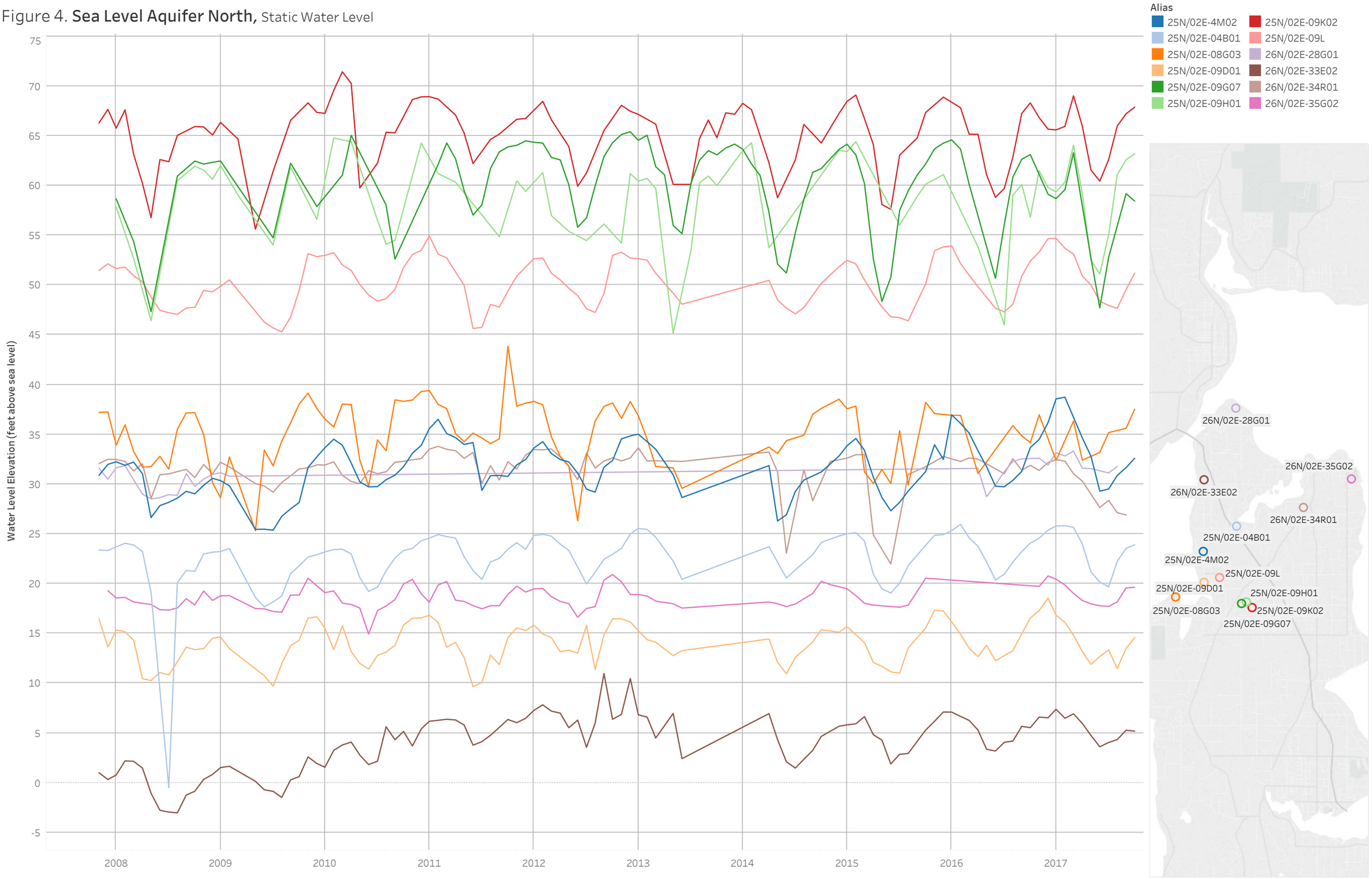


Figure 5. **Sea Level Aquifer Central,** Static Water Level

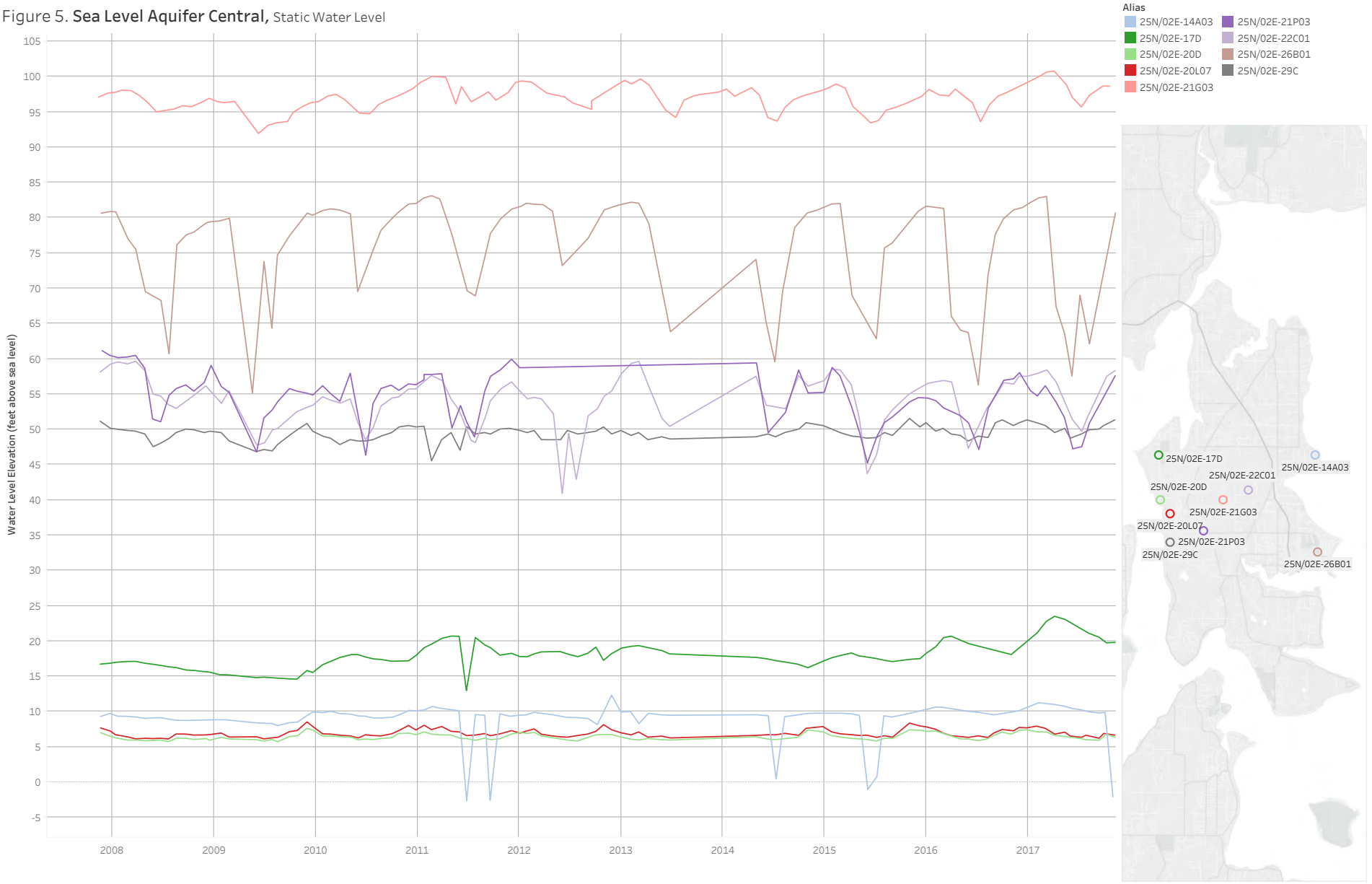
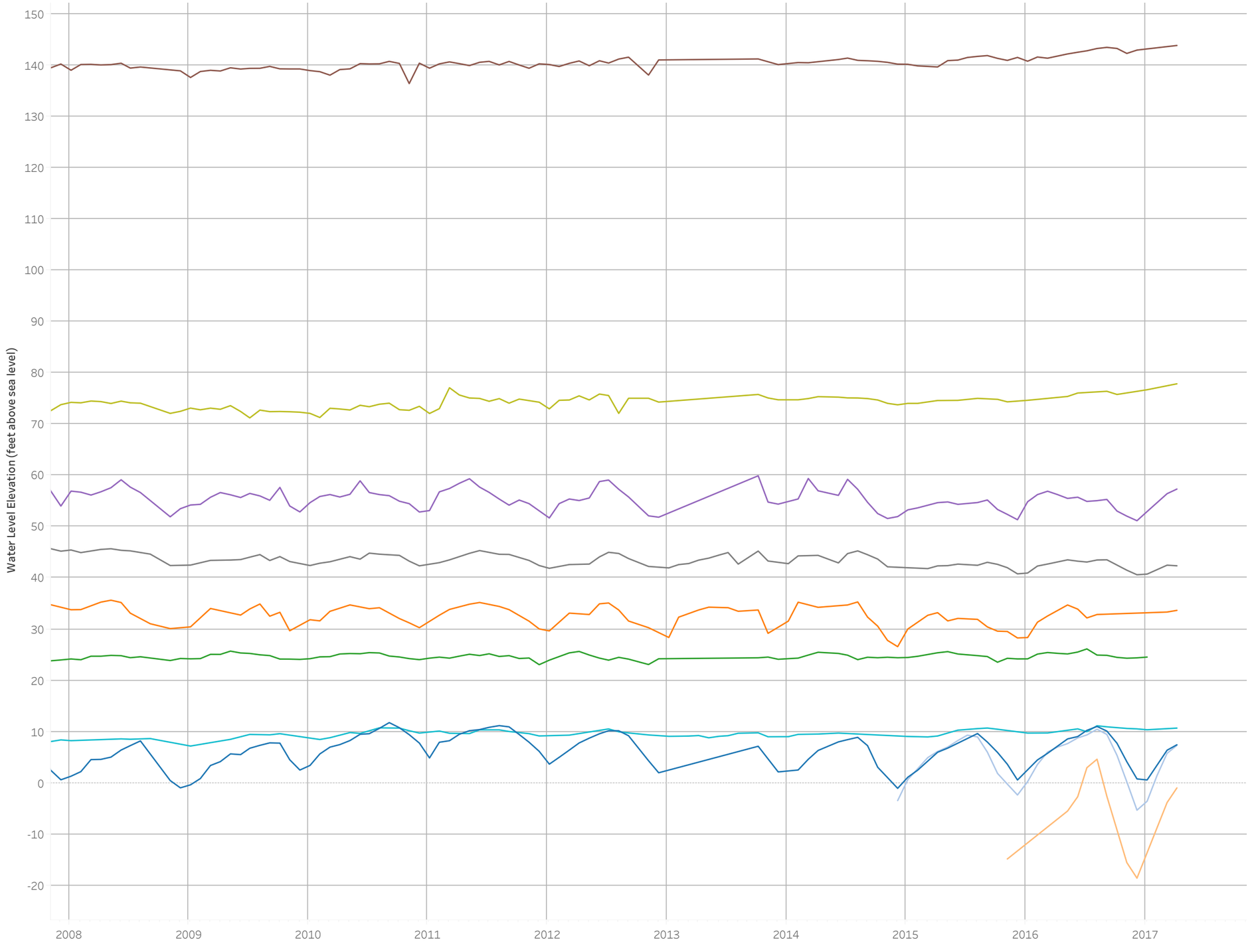


Figure 6. **Sea Level Aquifer South,** Static Water Level



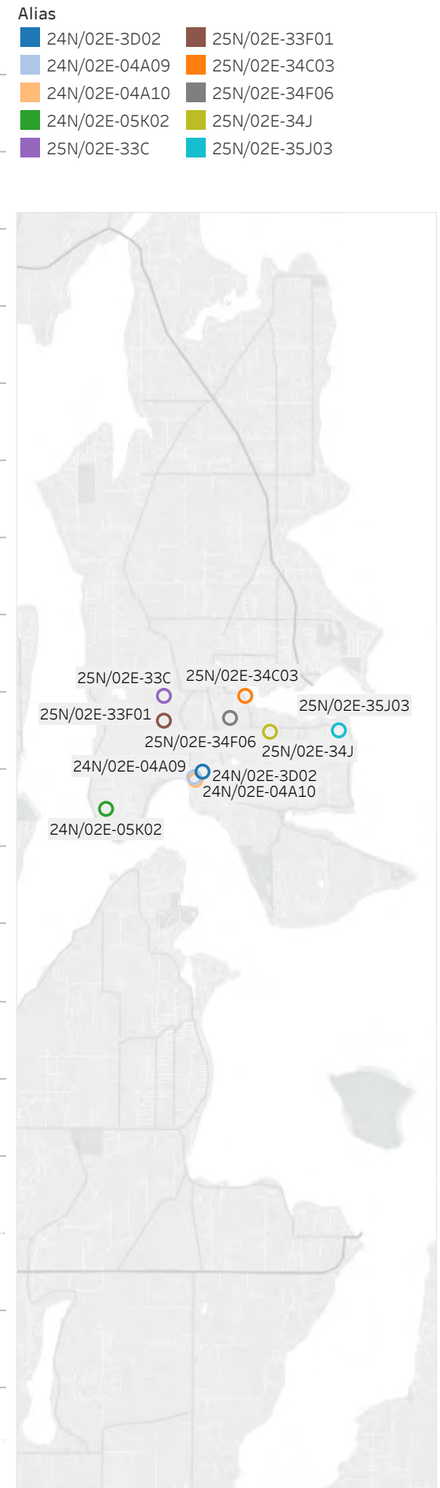


Figure 7. **Sea Level Aquifer, Head of the Bay Well Field,** Static Water Level

Figure 8. **Glaciomarine Aquifer,** Static Water Level

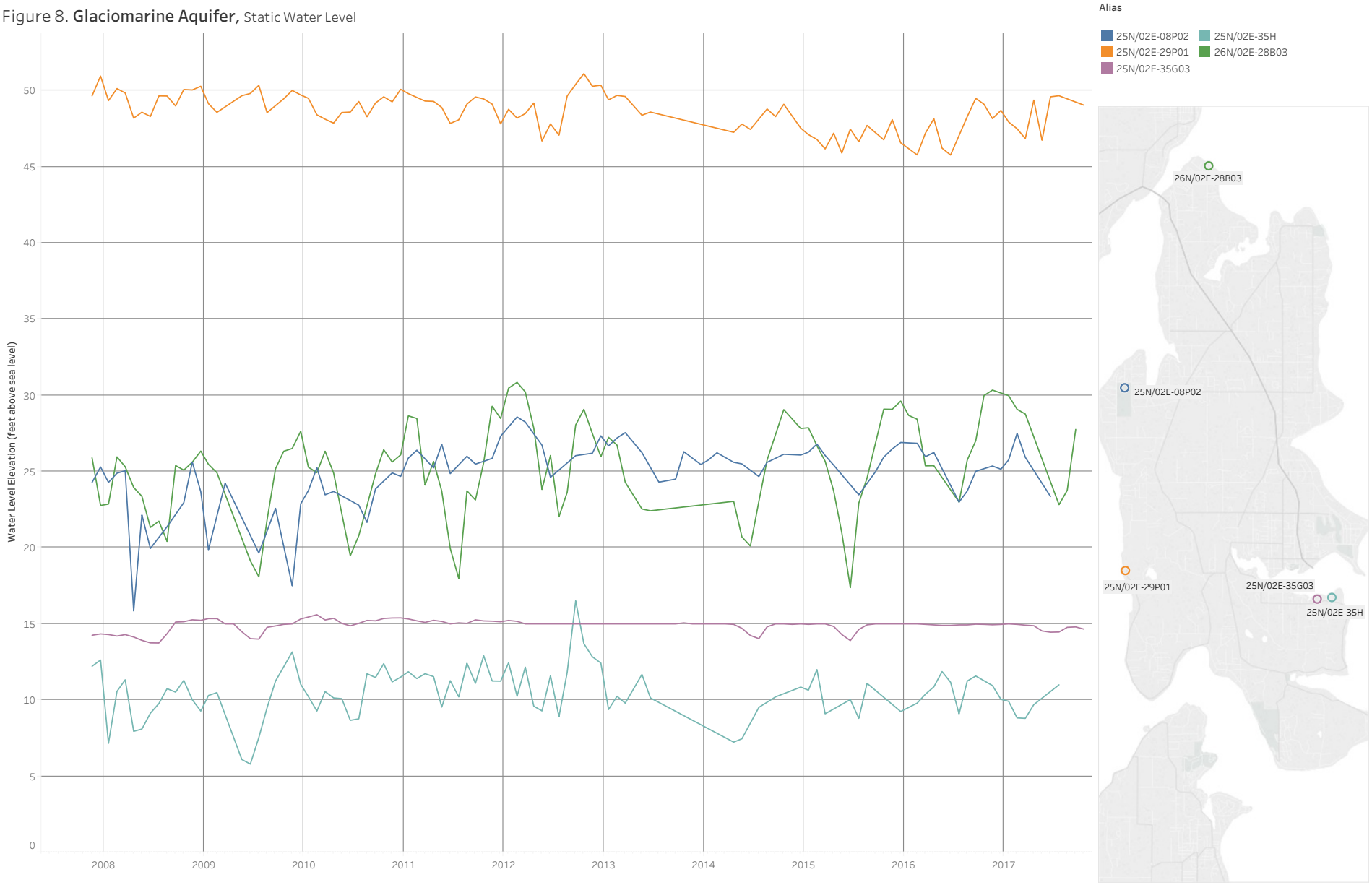
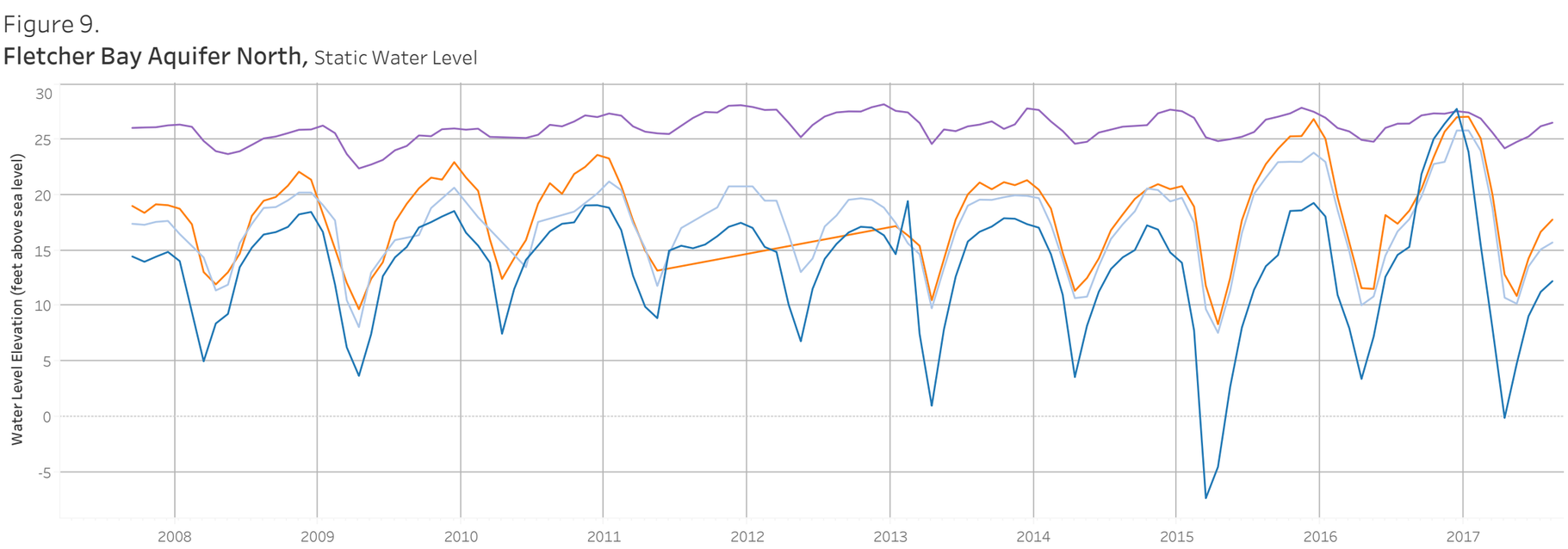
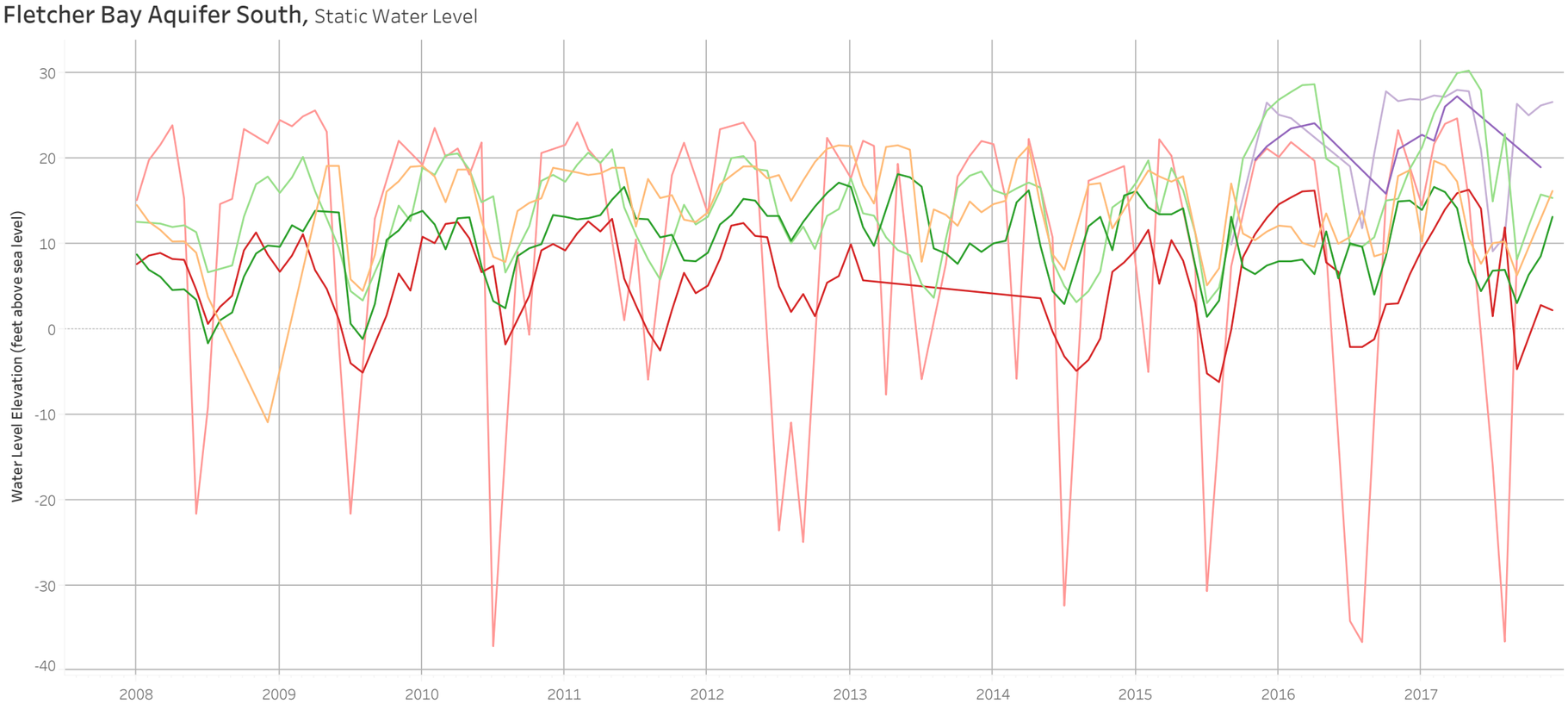


Figure 9.

Fletcher Bay Aquifer North, Static Water Level



Fletcher Bay Aquifer South, Static Water Level



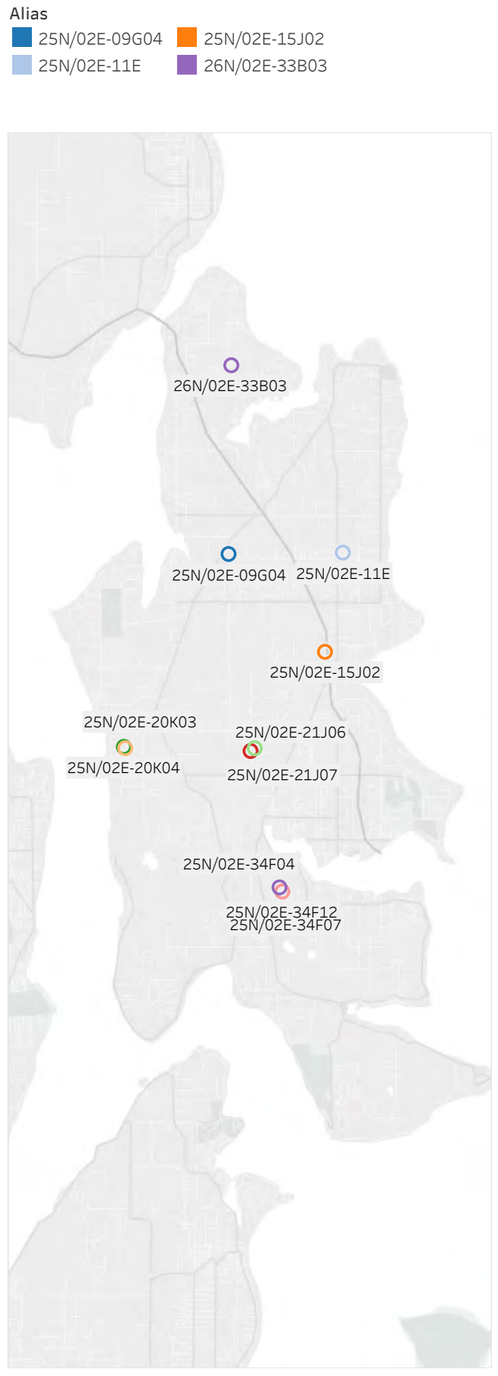


Figure 10. **Bedrock Aquifer,** Static Water Level

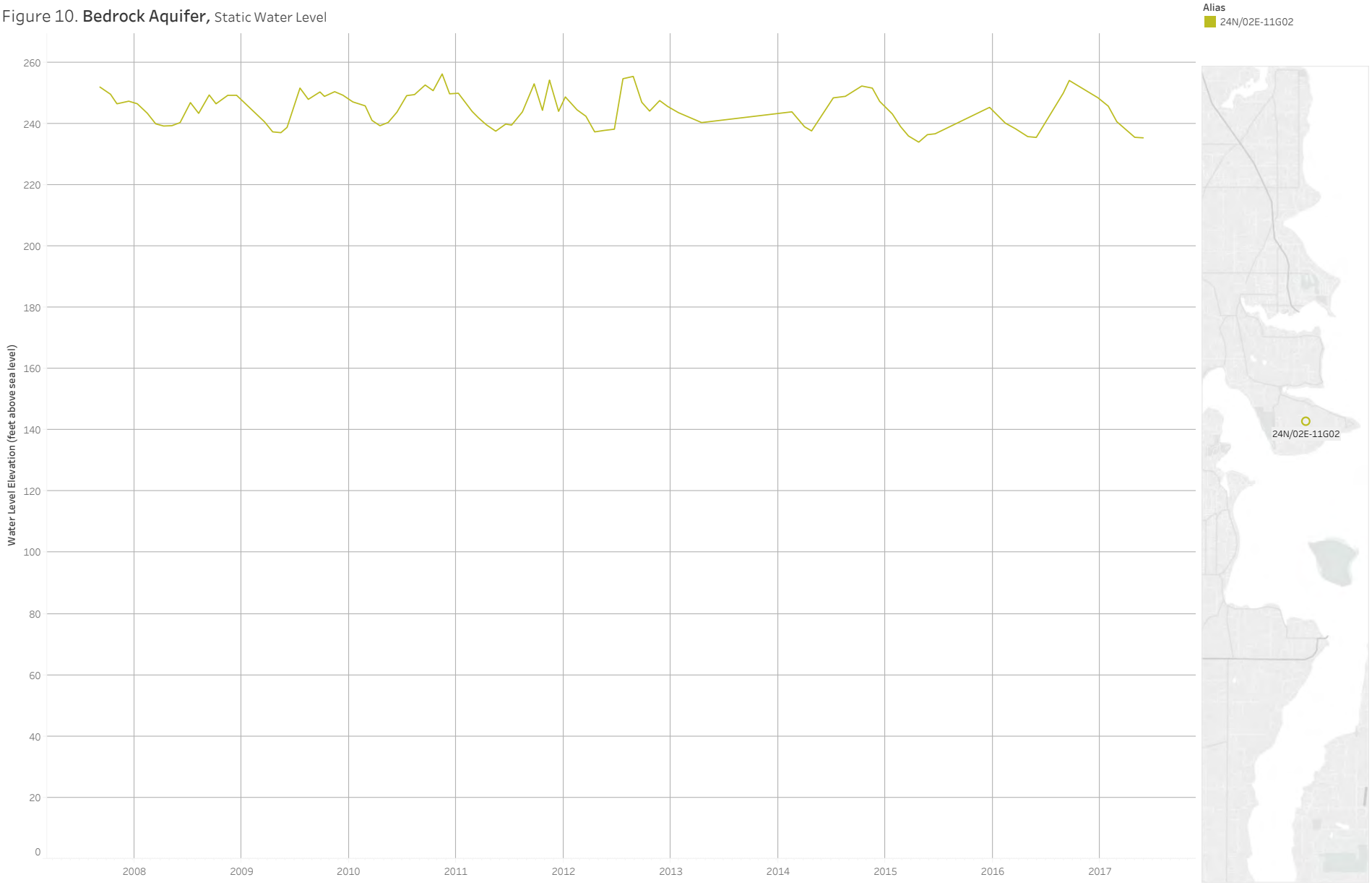
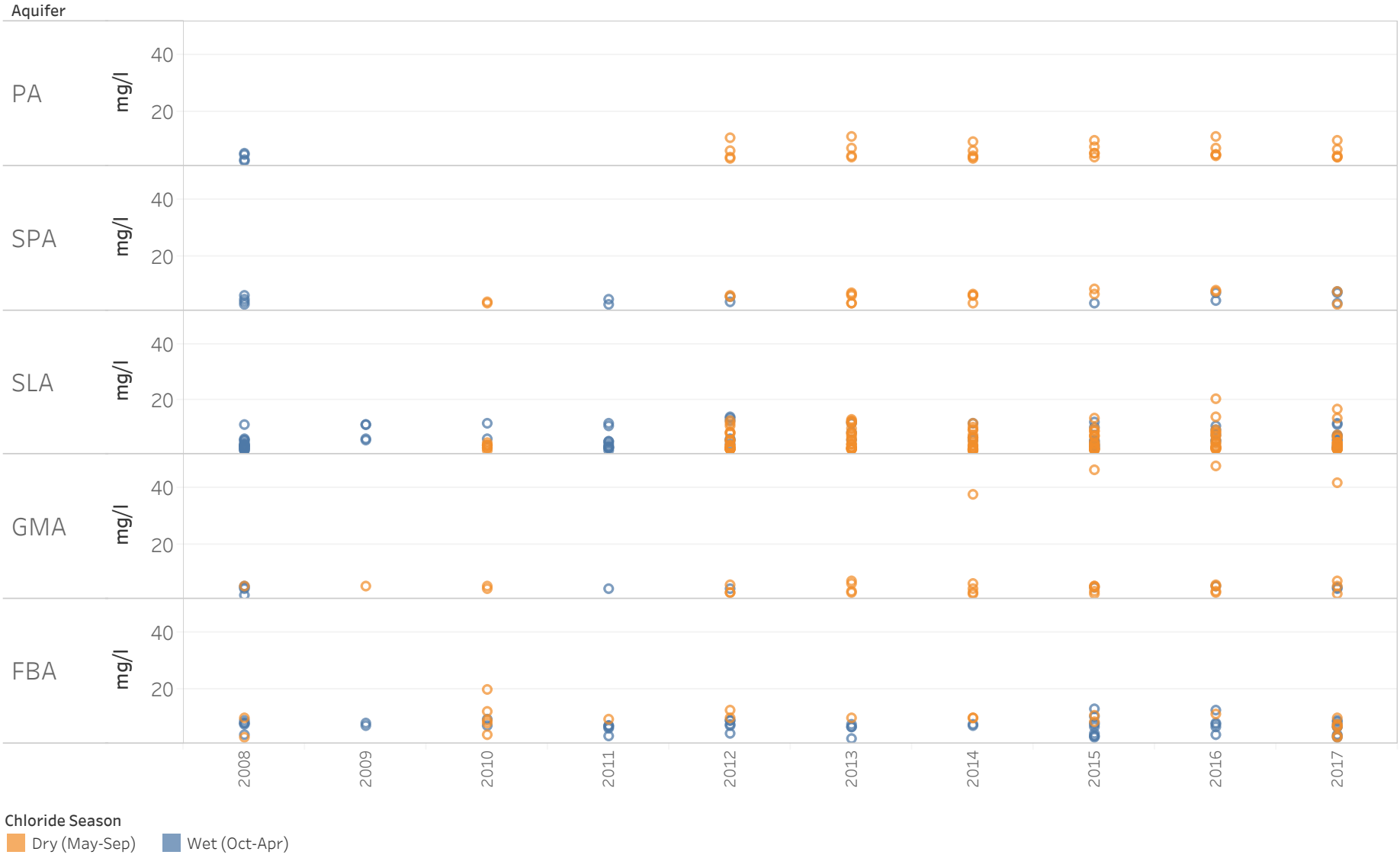


Figure 11. Chloride By Season



Tables

Table 1. Monitoring Well Network

Well ID	Local Number	DOE Tag	Latitude	Longitude	Surface Elevation (NAV88)	Aquifer	Specific Conductivity	Chloride	Water Level
Bloedel Reserve Farm Well	26N/02E-33B01	AAC759	47.70472221	-122.5463889	165	PA			KPUD
Private	24N/02E-05K03		47.5981882	-122.57504	23	PA	COBI-Eng	COBI-Eng	COBI-Eng
Private	25N/02E-17G01		47.6591543	-122.57347	155	PA			COBI-Eng
Casey Street Water System	25N/02E-23E03	AAC654	47.643094	-122.51247	167	PA			COBI-Eng
Private	25N/02E-35M03		47.6136761	-122.51997	172	PA			COBI-Eng
Johnson Farm	25N/02E-28F		47.63204475	-122.5542631	154	PA			COBI-Eng
Private	25N/02E-03G01		47.6865255	-122.5263	231	PA			COBI-Eng
Private	25N/02E-28N02		47.6230273	-122.56082	315	PA			COBI-Eng
North Bainbridge Well 08	25N/02E-11E01	AAC832	47.67342224	-122.5197528	351	PA			KPUD
Onorato Water System	25N/02E-17Q01	AAC862	47.6519712	-122.57217	86	PA	COBI-Eng	COBI-Eng	COBI-Eng
Private	25N/02E-04D01		47.6887152	-122.56013	124	PA			COBI-Eng
Private	25N/02E-10E		47.6744147	-122.5425	94	PA	COBI-Eng	COBI-Eng	COBI-Eng
Private	25N/02E-20P2		47.6369374	-122.57509	213	PA			COBI-Eng
Private	24N/02E-04H01		47.6002037	-122.5445919	68	PA	COBI-Eng	COBI-Eng	COBI-Eng
Tara Lane Community Well	24N/02E-05R01	AAC032	47.59527776	-122.565	132	PA	COBI-Eng	COBI-Eng	COBI-Eng
Private	24N/02E-05K01		47.598642	-122.57162	101	PA			COBI-Eng
Private	25N/02E-33B02		47.618819	-122.549247	167	SPA			COBI-Eng
Private	25N/02E-21B		47.6492626	-122.54839	314	SPA			COBI-Eng
Private	25N/02E-23Q03		47.6373367	-122.50643	154	SPA	COBI-Eng	COBI-Eng	COBI-Eng
Eagledale Park	25N/02E-34R05	AAC077	47.6093853	-122.5217	293	SPA			COBI-Eng
Ferncliff Water Assoc.	25N/02E-23K		47.64295231	-122.5092888	140	SPA	COBI-Eng	COBI-Eng	COBI-Eng
Hidden Cove Utilities Shop	25N/02E-04G03	ACR406	47.68722324	-122.5466662	130	SPA	COBI-O&M	COBI-O&M	COBI-Eng
High School Well #2/Commodore	25N/02E-22R02	AAA239	47.63805555	-122.5252778	266	SPA	COBI-O&M	COBI-O&M	
North Bainbridge Well 01	25N/02E-09G06	AAC826	47.67305558	-122.5483334	125	SPA			KPUD
Private	25N/02E-33F01		47.61573172	-122.5547039	304	SLA			COBI-Eng
Private	25N/02E-08G03	AEK777	47.6740726	-122.57134	76	SLA	COBI-Eng	COBI-Eng	COBI-Eng
Bainbridge Island Landfill	25N/02E-33C		47.6206239	-122.55455	269	SLA			COBI-Eng
Private	25N/02E-22C01		47.6502164	-122.53608	159	SLA	COBI-Eng	COBI-Eng	COBI-Eng
Bill Point Water Well 3	25N/02E-35J03	AAA238	47.61388736	-122.5027778	139	SLA			KPUD
Cedar Lane Water System	26N/02E-28J02	AAC659	47.7130591	-122.54722	147	SLA	COBI-Eng	COBI-Eng	
Private	25N/02E-09D01		47.6775891	-122.56128	29	SLA			COBI-Eng
Private	25N/02E-21P03		47.6364798	-122.5584	70	SLA	COBI-Eng	COBI-Eng	COBI-Eng
Fay Bainbridge Park	26N/02E-35G02		47.702141	-122.50893	86	SLA			COBI-Eng
Private	25N/02E-17D		47.6620085	-122.58093	120	SLA	COBI-Eng	COBI-Eng	COBI-Eng
Former KPUD Island Center TW	25N/02E-21G03	AAA110	47.64694444	-122.5483334	300	SLA			KPUD
Harbor Crest	25N/02E-34C03	ACD357	47.62083333	-122.5305556	72	SLA	KPUD	KPUD	KPUD
Head of the Bay Well #1	25N/02E-27E21		47.62912223	-122.5420349	34	SLA	COBI-O&M	COBI-O&M	
Head of the Bay Well #1A	25N/02E-27E15	AAC860	47.62931472	-122.5419462	32	SLA	COBI-O&M	COBI-O&M	
Head of the Bay Well #2	25N/02E-27E16	AAC870	47.62910175	-122.5418904	30	SLA	COBI-O&M	COBI-O&M	COBI-O&M
Head of the Bay Well #3	25N/02E-27E17	AAC871	47.63032187	-122.5419878	47	SLA	COBI-O&M	COBI-O&M	COBI-O&M
Head of the Bay Well #4	25N/02E-27E18	AAC872	47.62898348	-122.5419656	29	SLA	COBI-O&M	COBI-O&M	
Head of the Bay Well #5	25N/02E-27E19	AAC873	47.62953631	-122.5419302	31	SLA	COBI-O&M	COBI-O&M	COBI-O&M
Head of the Bay Well #6	25N/02E-27E20	AAC874	47.63007014	-122.5419437	42	SLA	COBI-O&M	COBI-O&M	

Well ID	Local Number	DOE Tag	Latitude	Longitude	Surface Elevation (NAV88)	Aquifer	Specific Conductivity	Chloride	Water Level
Island Utilities MW	25N/02E-34F06	AAA108	47.61638891	-122.535	144	SLA			KPUD
Private	25N/02E-04B01		47.6910036	-122.54969	83	SLA	COBI-Eng	COBI-Eng	COBI-Eng
Private	25N/02E-20L07	AHB475	47.642306	-122.57493	61	SLA	COBI-Eng	COBI-Eng	COBI-Eng
Private	26N/02E-34R01		47.6954386	-122.52589	101	SLA	COBI-Eng	COBI-Eng	COBI-Eng
Private	25N/02E-4M02	AEK791	47.6849785	-122.56143	100	SLA	COBI-Eng	COBI-Eng	COBI-Eng
Private	25N/02E-23G		47.6458618	-122.50976	100	SLA	COBI-Eng	COBI-Eng	
Messenger House	25N/02E-14A03		47.6619375	-122.50237	100	SLA	COBI-Eng	COBI-Eng	COBI-Eng
Private	26N/02E-28G01		47.7190713	-122.54998	122	SLA	COBI-Eng	COBI-Eng	COBI-Eng
Private	25N/02E-20D	ABP813	47.647079	-122.57978	114	SLA	COBI-Eng	COBI-Eng	COBI-Eng
North Bainbridge Well 03	25N/02E-09H01	AEK853	47.6727778	-122.5463889	87	SLA	KPUD	KPUD	KPUD
North Bainbridge Well 06	25N/02E-09K02	AAA113	47.67154446	-122.544175	91	SLA			KPUD
North Bainbridge Well 07	25N/02E-09G07	AEK852	47.6725	-122.5480556	125	SLA	KPUD	KPUD	KPUD
Private	25N/02E-09L		47.67871727	-122.5556762	65	SLA			COBI-Eng
Private	25N/02E-32C01		47.6199253	-122.57631	50	SLA	COBI-Eng	COBI-Eng	
Private	24N/02E-3D02		47.60568831	-122.5431455	153	SLA	COBI-Eng	COBI-Eng	COBI-Eng
Private	24N/02E-05K02		47.5981715	-122.57172	112	SLA			COBI-Eng
Private	25N/02E-29C		47.6325565	-122.57492	281	SLA			COBI-Eng
Seabold Water	26N/02E-33E02	ACW018	47.7020129	-122.56141	118	SLA			COBI-Eng
South Bainbridge WS Well 7	24N/02E-04A02	ACK364	47.604519	-122.544978	88	SLA	KPUD	KPUD	KPUD
South Bainbridge WS Well 8	24N/02E-04A09	ACW030	47.604461	-122.545564	68	SLA	KPUD	KPUD	KPUD
South Bainbridge WS Well 9	24N/02E-04A10	APP319	47.604033	-122.545111	71	SLA			KPUD
Private	25N/02E-34J		47.6135695	-122.52319	212	SLA	COBI-Eng	COBI-Eng	COBI-Eng
West Port Madison Water System	26N/02E-34E04	AAC800	47.7032265	-122.53834	67	SLA	COBI-Eng	COBI-Eng	
Wing Point COBI	25N/02E-26B01		47.62926389	122.5013139	128	SLA			COBI-Eng
Battle Point Park	25N/02E-08P02	AAC558	47.66583333	-122.5775	130	GMA			KPUD
Private	25N/02E-29P01		47.6220935	-122.57724	65	GMA	COBI-Eng	COBI-Eng	COBI-Eng
EPA/Wyckoff	25N/02E-35H	AFR832	47.61554031	-122.5036165	15	GMA	COBI-Eng	COBI-Eng	COBI-Eng
Private	26N/02E-28B03	ACW040	47.7190839	-122.54762	95	GMA	COBI-Eng	COBI-Eng	COBI-Eng
Private	25N/02E-34H02		47.616973	-122.52489	54	GMA	COBI-Eng	COBI-Eng	
Taylor Road Well	25N/02E-35G03	AAC879	47.61527778	-122.5088889	15	GMA	COBI-O&M	COBI-O&M	COBI-O&M
Bloedel Reserve Deep Well	26N/02E-33B03	AAC606	47.70472222	-122.5477778	180	FBA			KPUD
Fletcher Bay Observation Well	25N/02E-20K03	AAA111	47.64055555	-122.5741667	80	FBA			KPUD
Fletcher Bay PW	25N/02E-20K04	AAC733	47.64068333	-122.5744056	85	FBA	COBI-O&M	COBI-O&M	COBI-O&M
Island Utilities Well 1	25N/02E-34F07	AAA109	47.61638891	-122.535	144	FBA			KPUD
Island Utilities Well 2	25N/02E-34F12	AAC113	47.61638889	-122.535	144	FBA	KPUD	KPUD	KPUD
Meigs Farm	25N/02E-15J02	AAA112	47.6565492	-122.52415	49	FBA			KPUD
North Bainbridge Well 09	25N/02E-09G04	AAB455	47.67305558	-122.5483334	125	FBA	KPUD	KPUD	KPUD
North Bainbridge Well 10	25N/02E-11E	AAC110	47.67333333	-122.5197222	351	FBA			KPUD
Sands Road 1	25N/02E-21J06	AAC875	47.64043056	-122.5418639	165	FBA	COBI-O&M	COBI-O&M	COBI-O&M
Sands Road 2	25N/02E-21J07	AAC876	47.64	-122.5427778	170	FBA	COBI-O&M	COBI-O&M	COBI-O&M
Seabold, Chloride	26N/02E-33E03	ALA779	47.70202778	-122.5613889	115	FBA	COBI-Eng	COBI-Eng	
Island Utilities Well 3	25N/02E-34F04	AAS286	47.617133	-122.5357	144	FBA			KPUD
Private	24N/02E-11G02		47.5858598	-122.50683	264	BED			COBI-Eng

Appendix A: Purpose and Definition of EWLs

A.1 Purpose

This discussion uses the safe yield EWL for demonstration. The purpose of specifying EWLs is to provide quantifiable measures for the initial evaluation of data. An EWL is a monitoring criteria that, if exceeded, would result in the need for additional sequential monitoring and investigative activities to confirm or rule out a developing problem.

Analogy: During your annual physical, your blood pressure reading may exceed the normal range. This is an exceedance of a screening criteria that leads your doctor to examine other criteria such as your height, weight, resting heartrate, any medications you are taking, your health history, and your family's health history. He/she will also ask you about your daily routine such as sleep, diet, and exercise, and may conduct further testing. This additional testing and examination is needed in order to confirm or rule-out a true blood pressure problem. **The initial high blood pressure reading, by itself, does not confirm that you have a high blood pressure problem**.

Likewise, an exceedance of the safe yield EWL calls for additional data evaluation, expanded monitoring, problem specific technical review and analysis, or modeling to confirm or rule-out long-term water use exceeding the aquifer's safe yield. **The initial exceedance of the safe yield EWL, by itself, is not a confirmation of long-term water use exceeding the safe yield.**

A.2 Definition

The definition of the EWL for safe yield is a long-term drop in water level equal to 1/2 foot per year or greater over a ten-year period that is *not attributable to seasonal or year-to-year variations in precipitation*. This means that if a drop in water level *can* be attributed to seasonal or year-to-year variations in precipitation (such as the 2015 unusually hot, dry summer), **it is not a confirmation of long-term water use exceeding the aquifer's safe yield.**

Continuing the analogy: Through discussing your daily routine with you, your doctor discovers that, although you and your family have no history of high blood pressure and you usually follow a very healthy daily routine, you got very little sleep the night before followed by a particularly stressful morning just prior to the blood pressure test. He/she directs you to return to your normal daily routine and come back in a week for re-testing. The following week, you return for re-testing, and re-testing shows your blood pressure has returned to normal. Retesting ruled out a high blood pressure problem.

Likewise, comparing water levels to rainfall patterns through the use of the CDP curve can identify when water level declines can be attributed to seasonal dry periods rather than long-term over use of the aquifer (see well hydrographs with CDP curve in Appendix B).

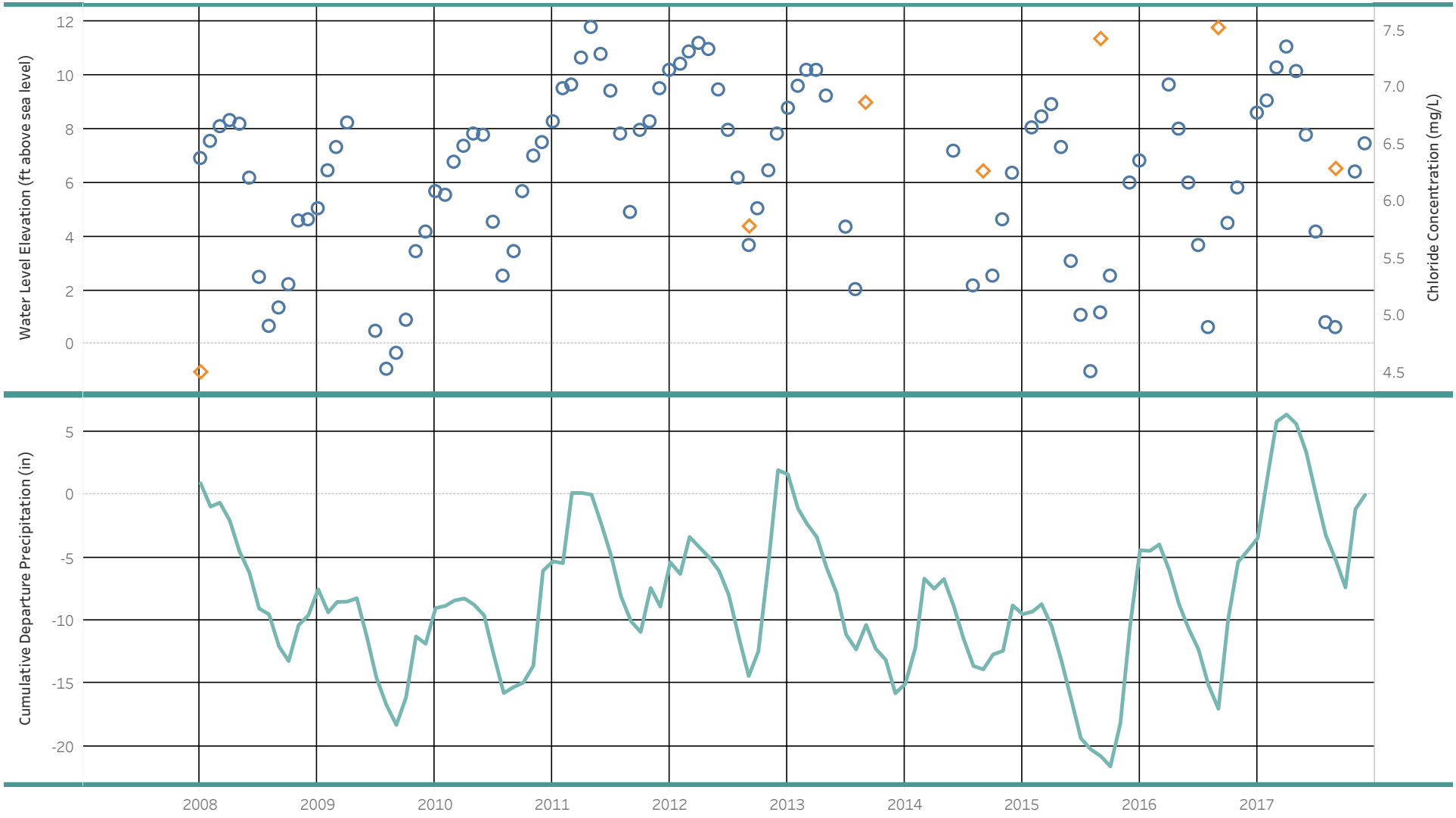
Appendix B: Well Hydrographs

As this is an assessment of data against the EWLs and not an in-depth hydrogeolgical assessment of historical water level, quality and production, the hydrographs presented here span only the current ten-year period of assessment (2008 – 2017).

Water level data were plotted as monthly averages, and water level trend calculations were based on an ordinary least squares fit to monthly averages of all static water level data.

It is important to note that reviewing data sets over a constrained period of time such as the ten-year period specified in the safe yield EWL can be useful, but it has some limitations. One significant limitation is that it isolates the current ten-year period from the longer, historical record, where such exists. The historical record could reveal that the current increasing or declining trend may be part of a natural, long-term fluctuation in water level and not the result of exceeding safe yield. It is important to consider the long-term record of all water levels, where such exists, when conducting follow up investigation.

Well Summary - 24N/02E-3D02 (SLA Aquifer)

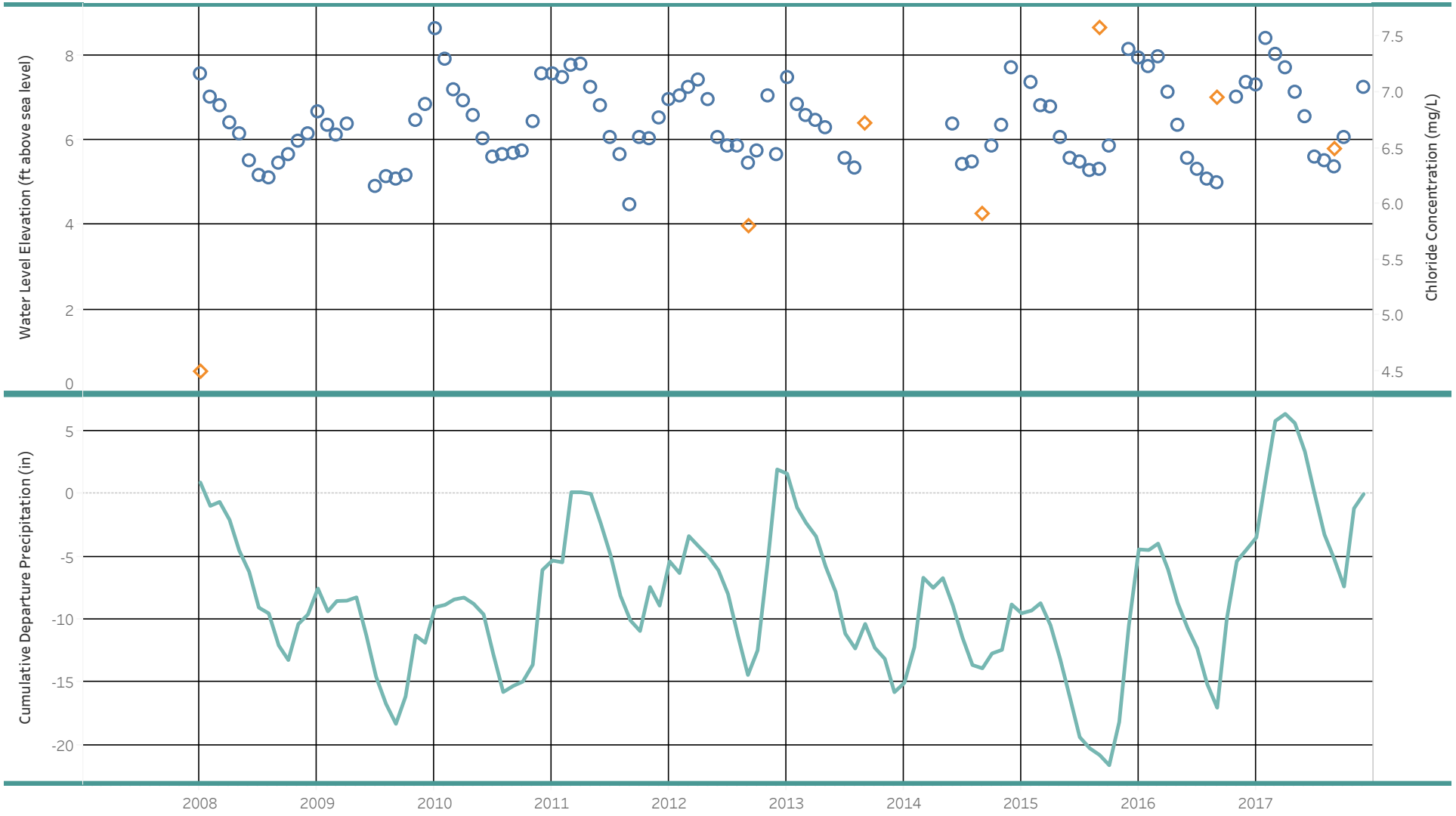


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 24N/02E-3D02 spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.03 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 24N/02E-04H01 (PA Aquifer)

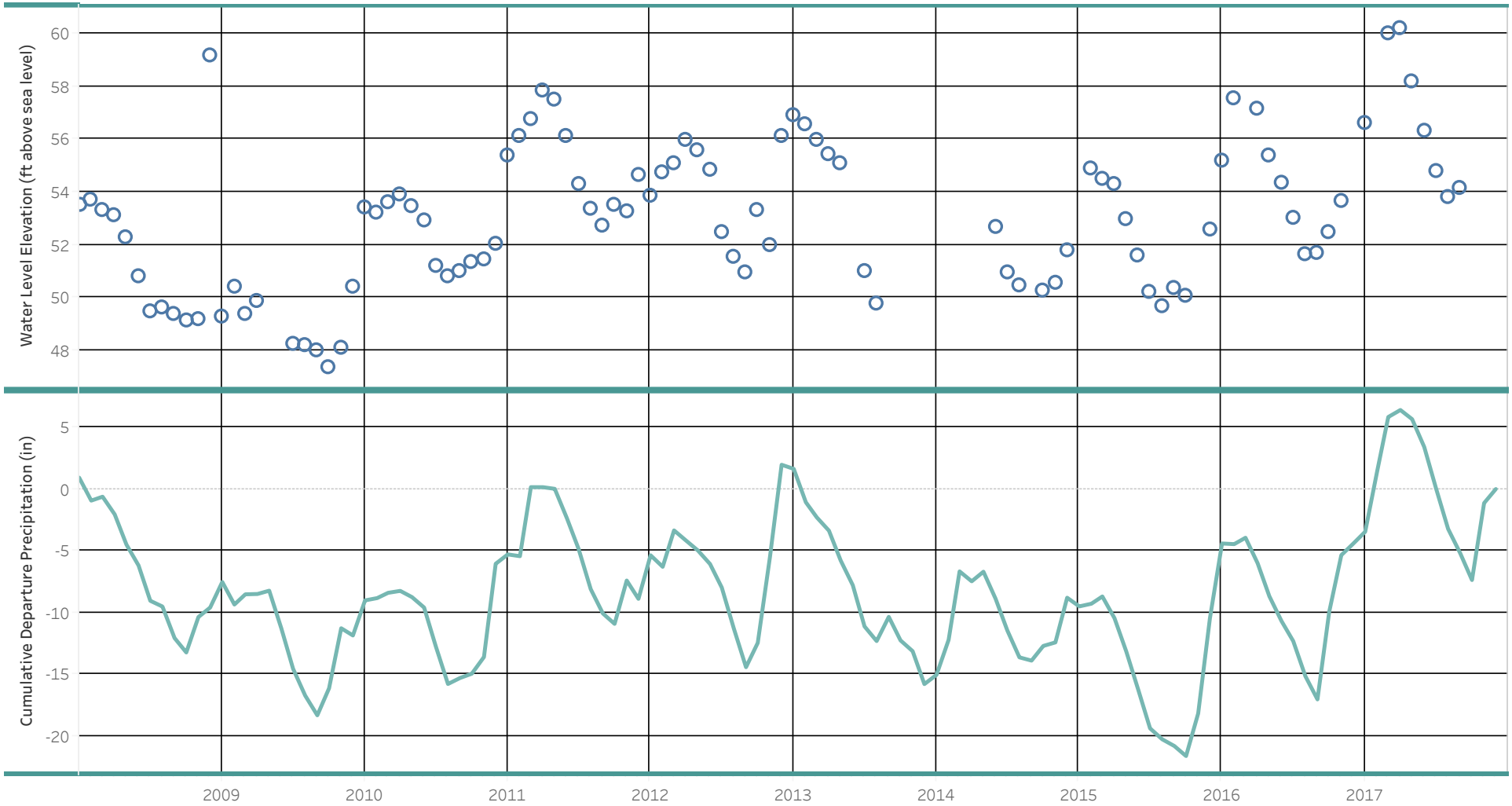


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 24N/02E-04H01 spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.03 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 24N/02E-05K01 (PA Aquifer)

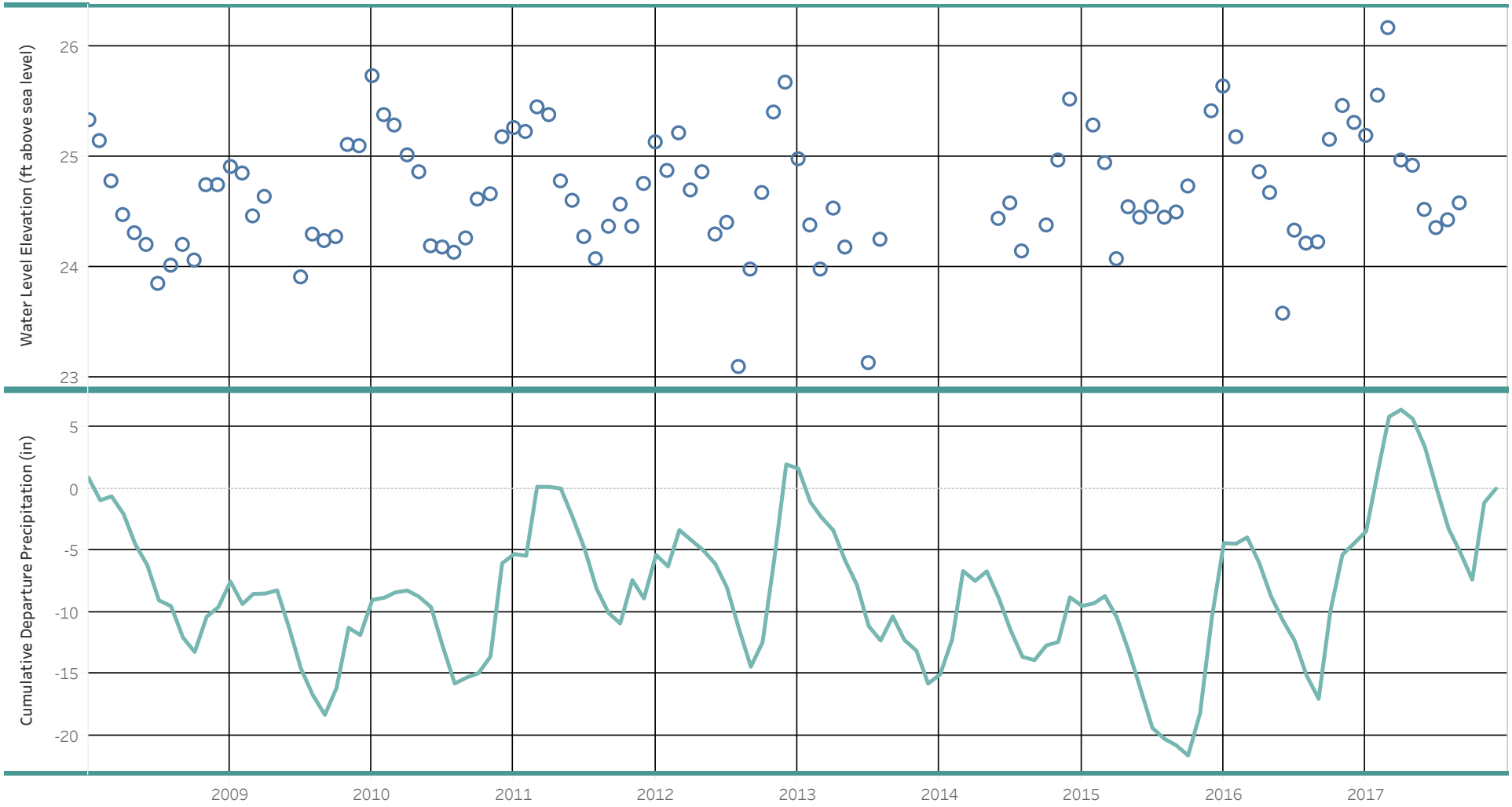


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 24N/02E-05K01 spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.35 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 24N/02E-05K02 (SLA Aquifer)

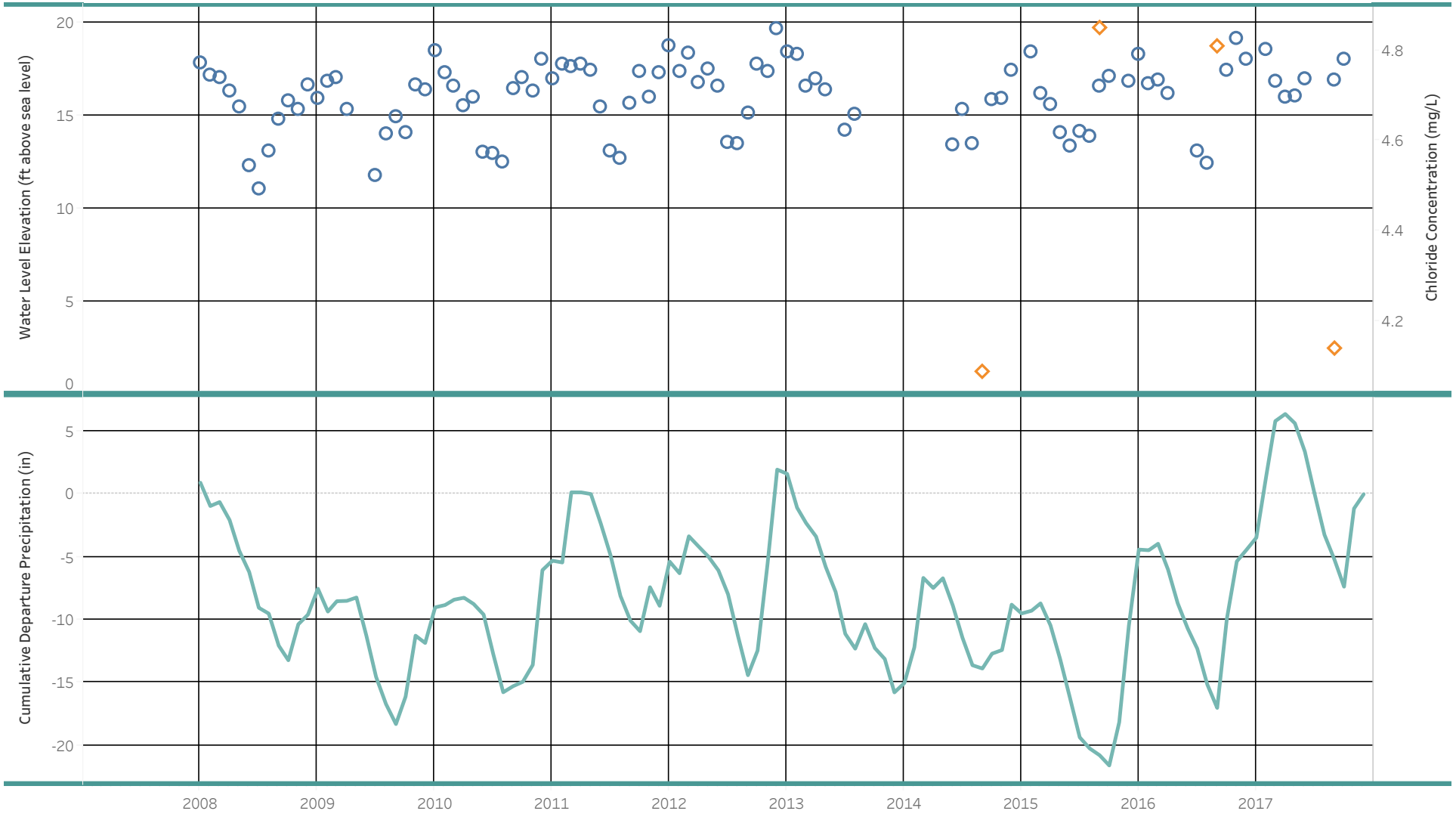


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 24N/02E-05K02 spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.02 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 24N/02E-05K03 (PA Aquifer)

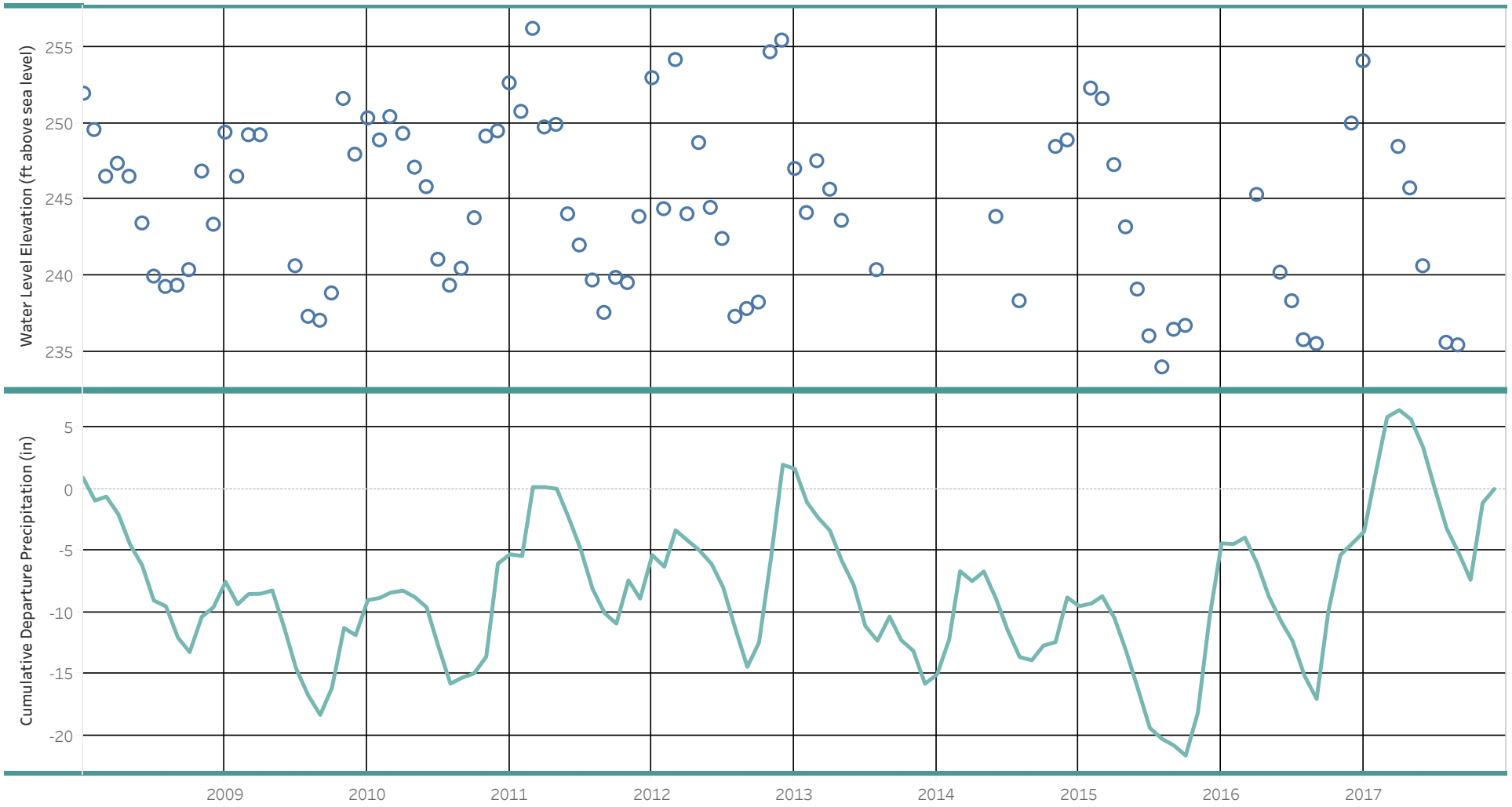


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 24N/02E-05K03 spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.11 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 24N/02E-11G02 (BED Aquifer)

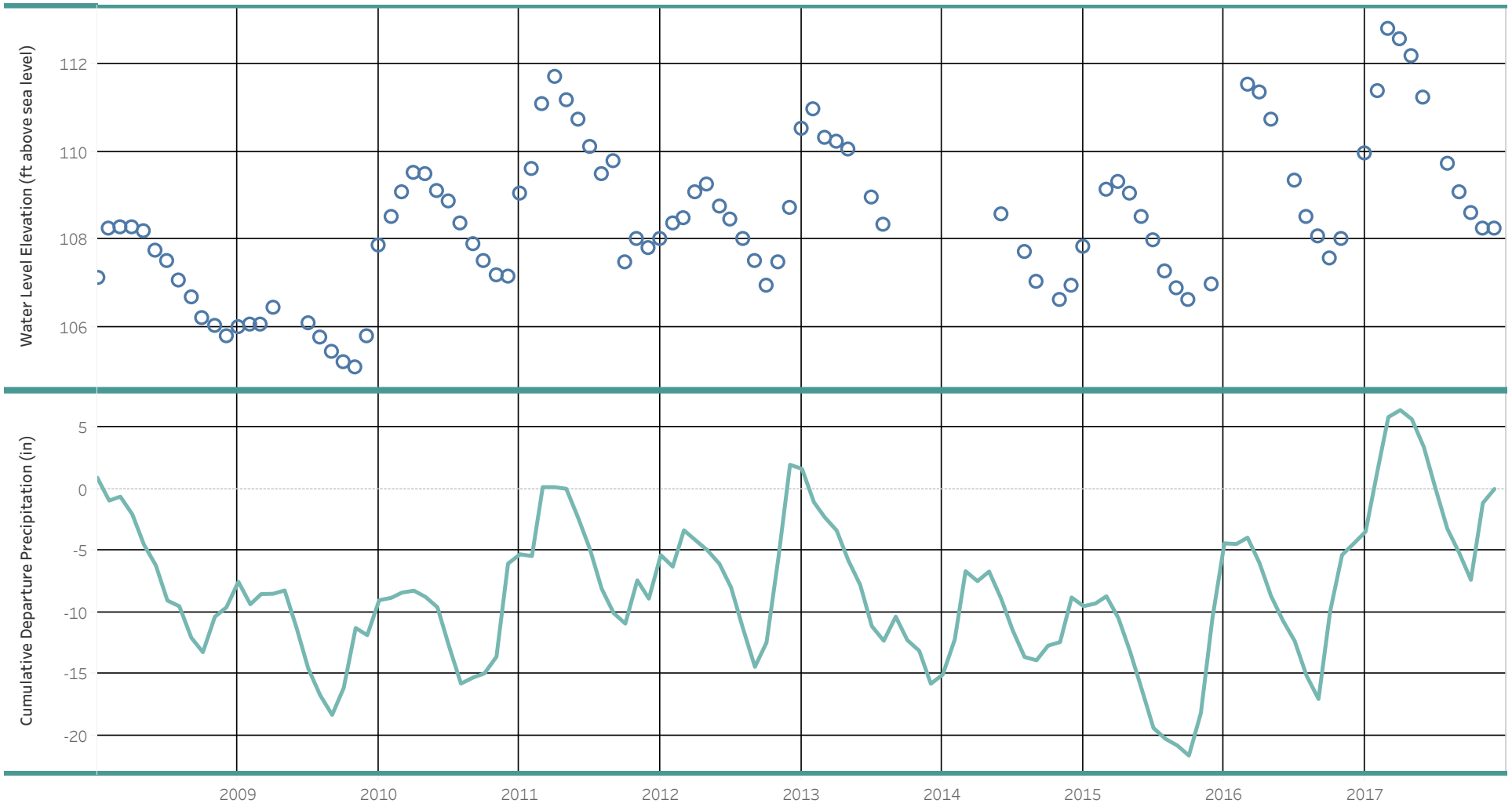


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 24N/02E-11G02 spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is -0.45 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 25N/02E-03G01 (PA Aquifer)

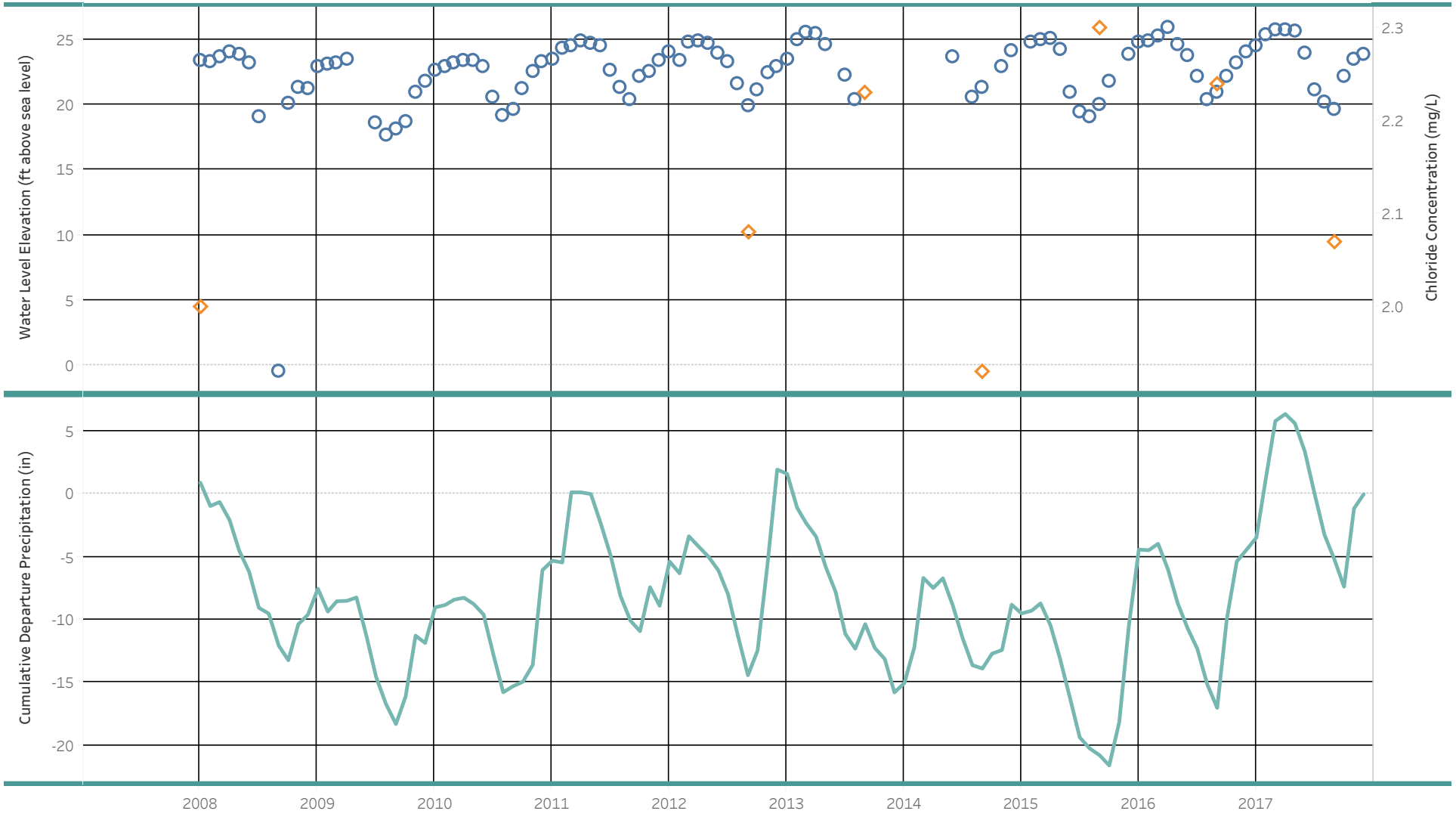


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-03G01 spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.25 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 25N/02E-04B01 (SLA Aquifer)

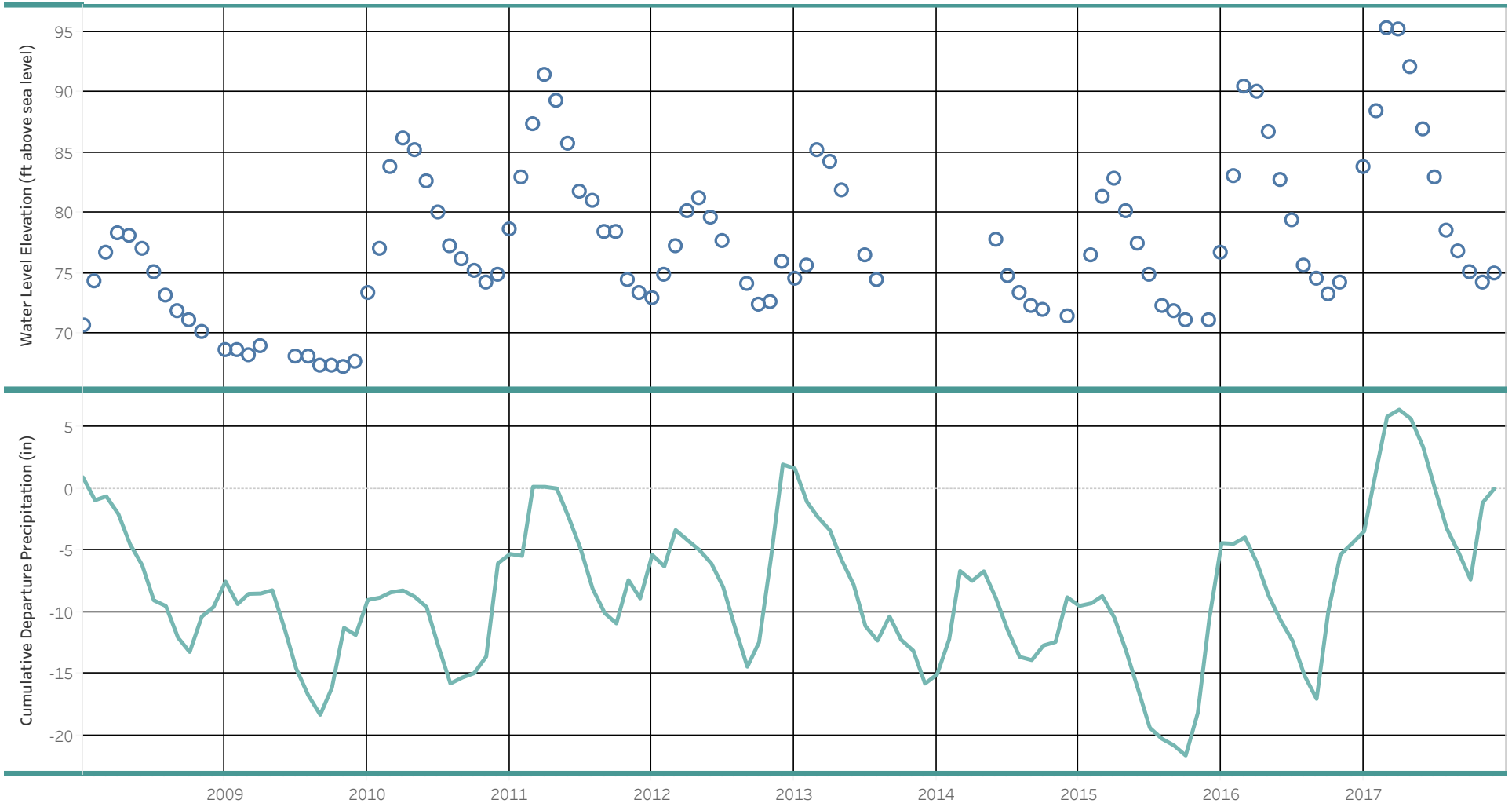


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-04B01 spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.24 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-04D01 (PA Aquifer)

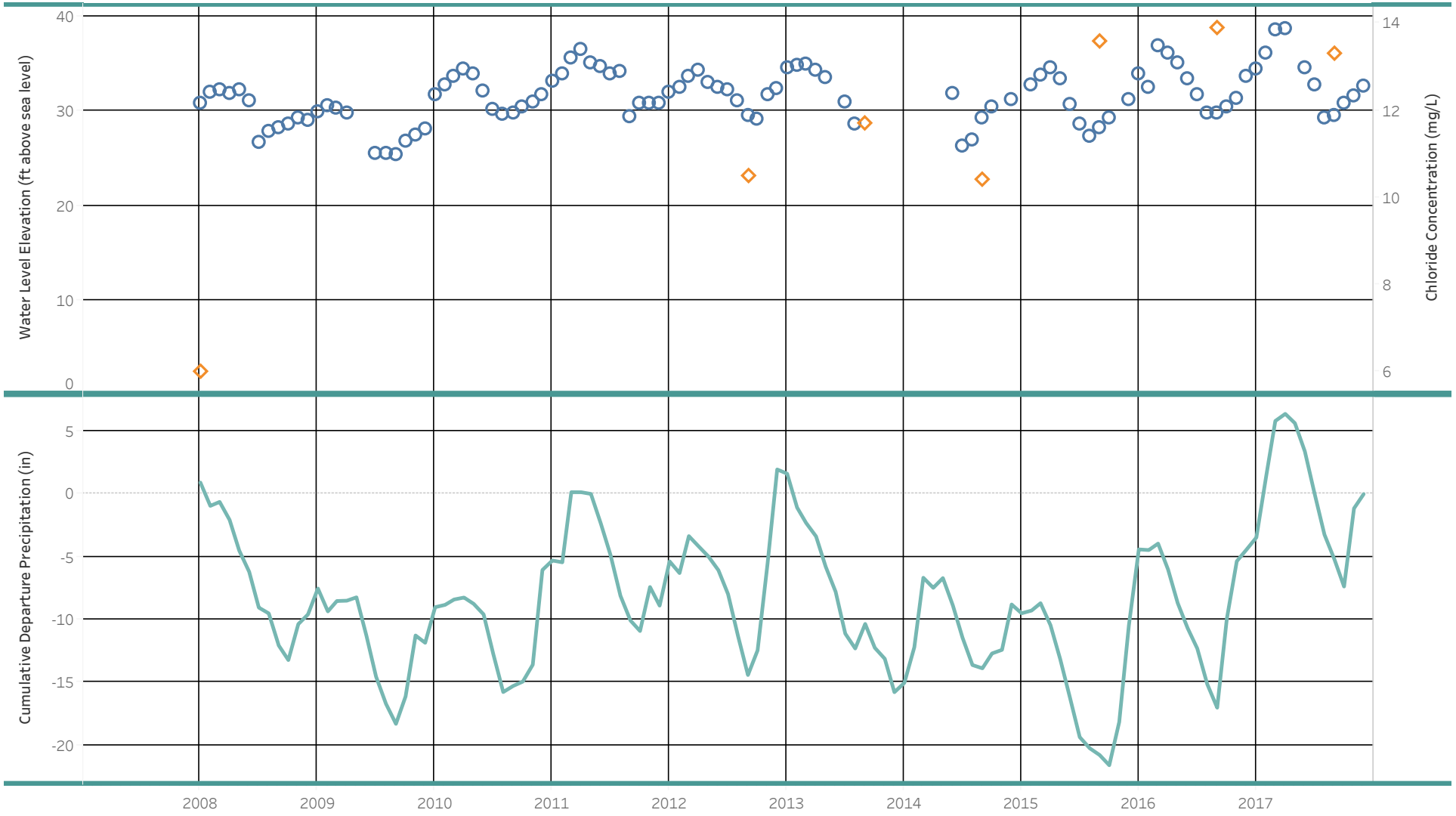


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-04D01 spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.75 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 25N/02E-4M02 (SLA Aquifer)

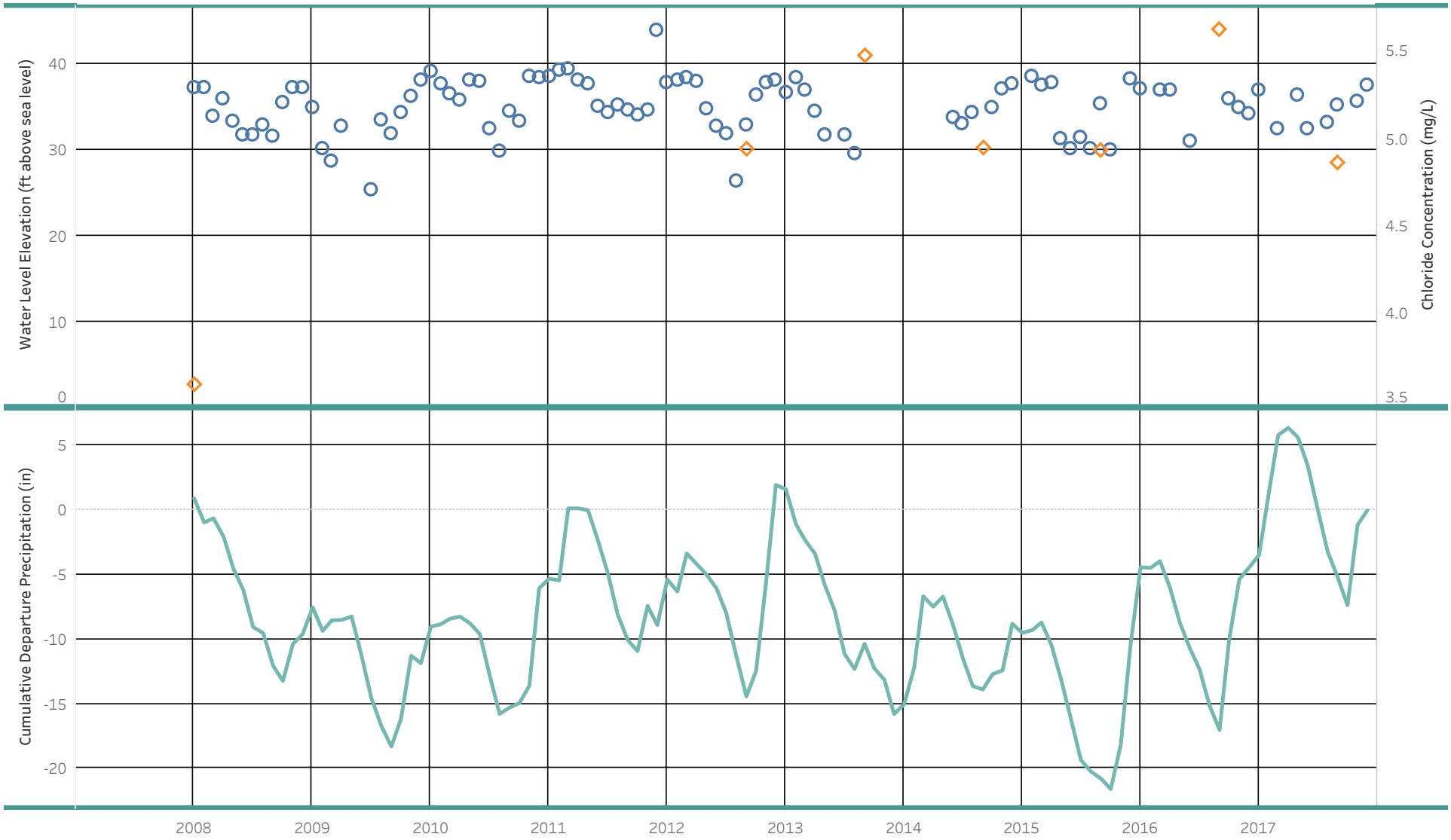


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-4M02 spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.28 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-08G03 (SLA Aquifer)

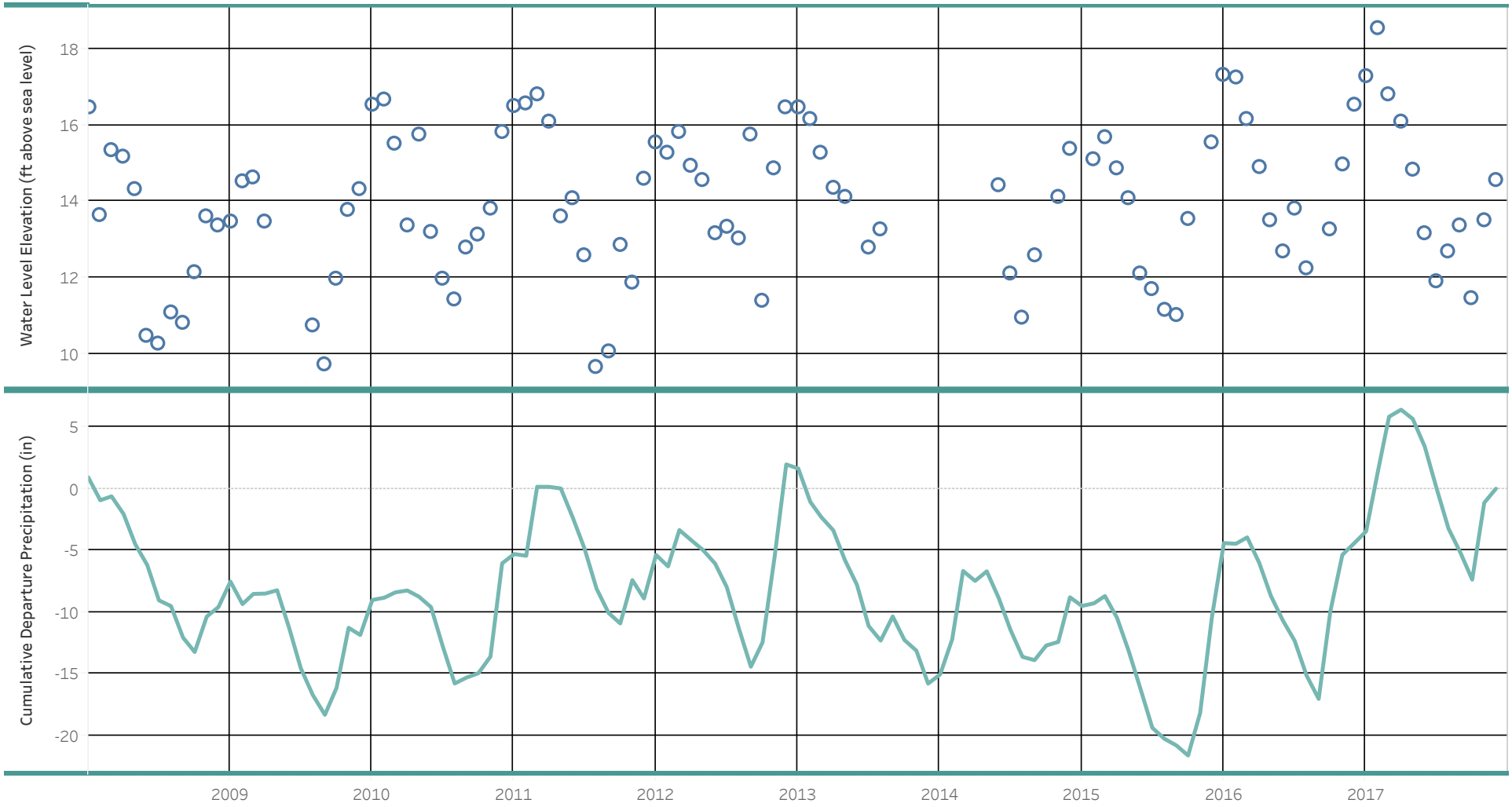


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-08G03 spans 10 years, which included a maximum data collection gap (in months) of: 10.4. Estimated static water level trend is 0.01 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-09D01 (SLA Aquifer)

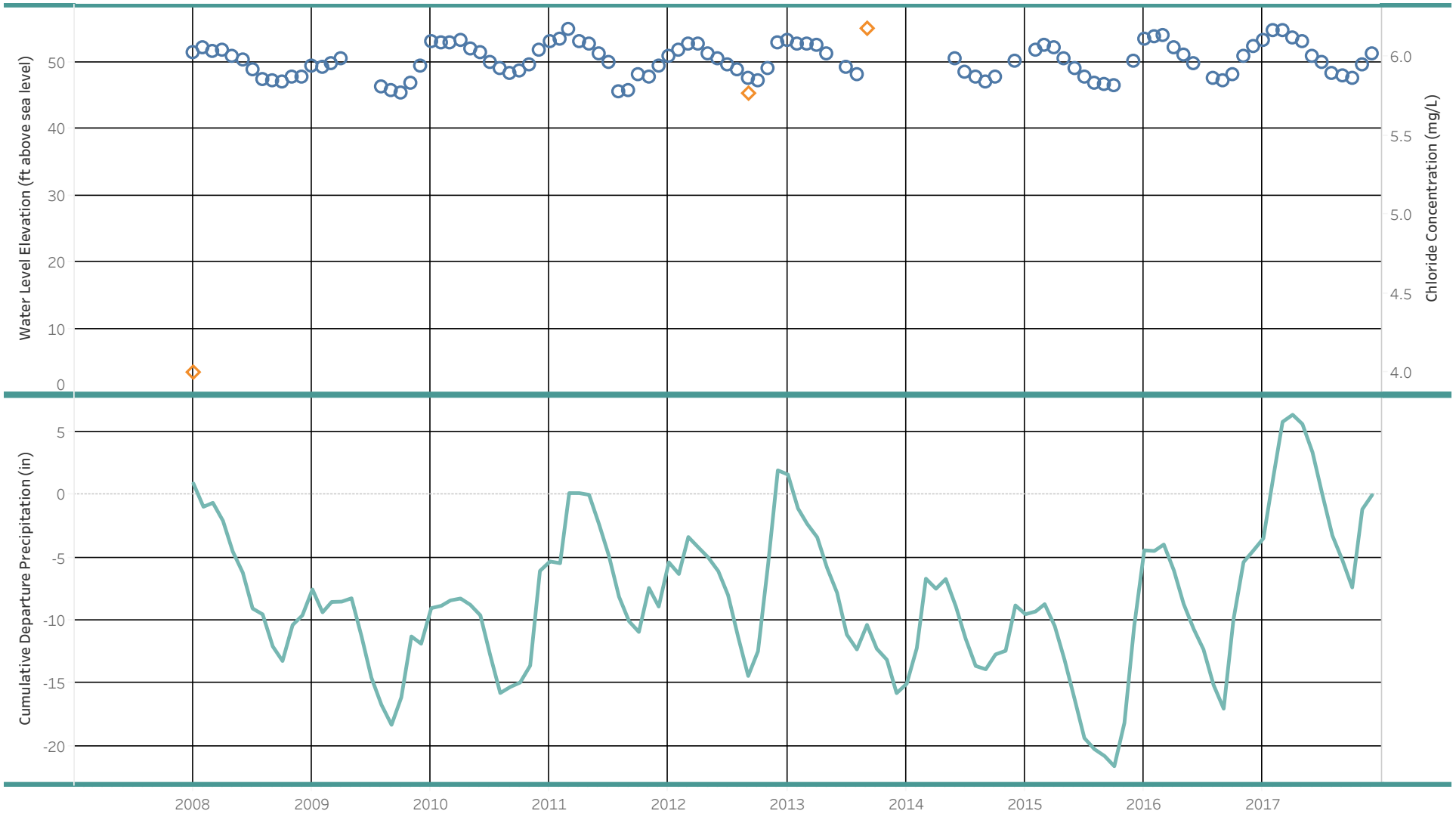


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-09D01 spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.1 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 25N/02E-09L (SLA Aquifer)

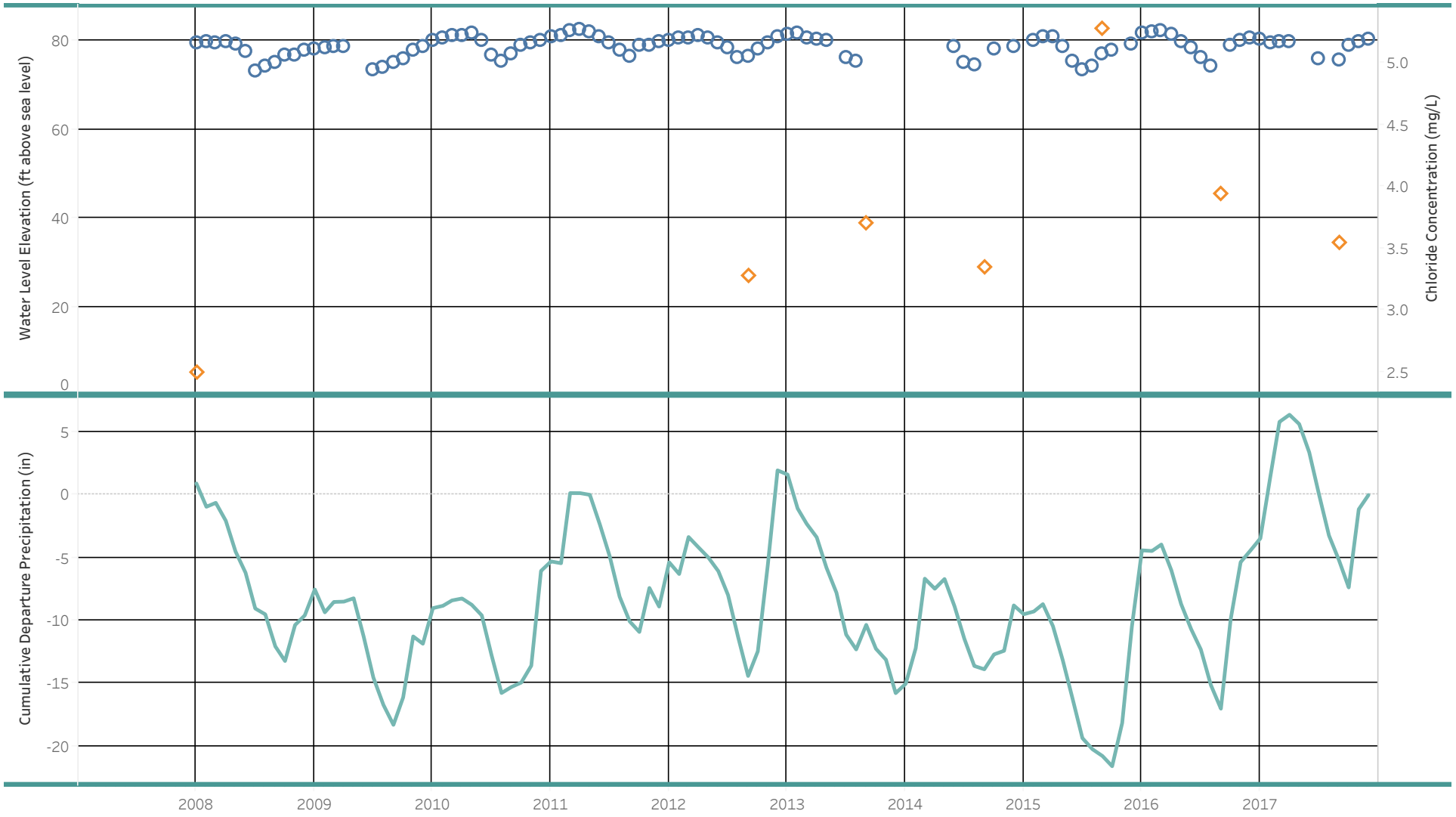


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-09L spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.09 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-10E (PA Aquifer)

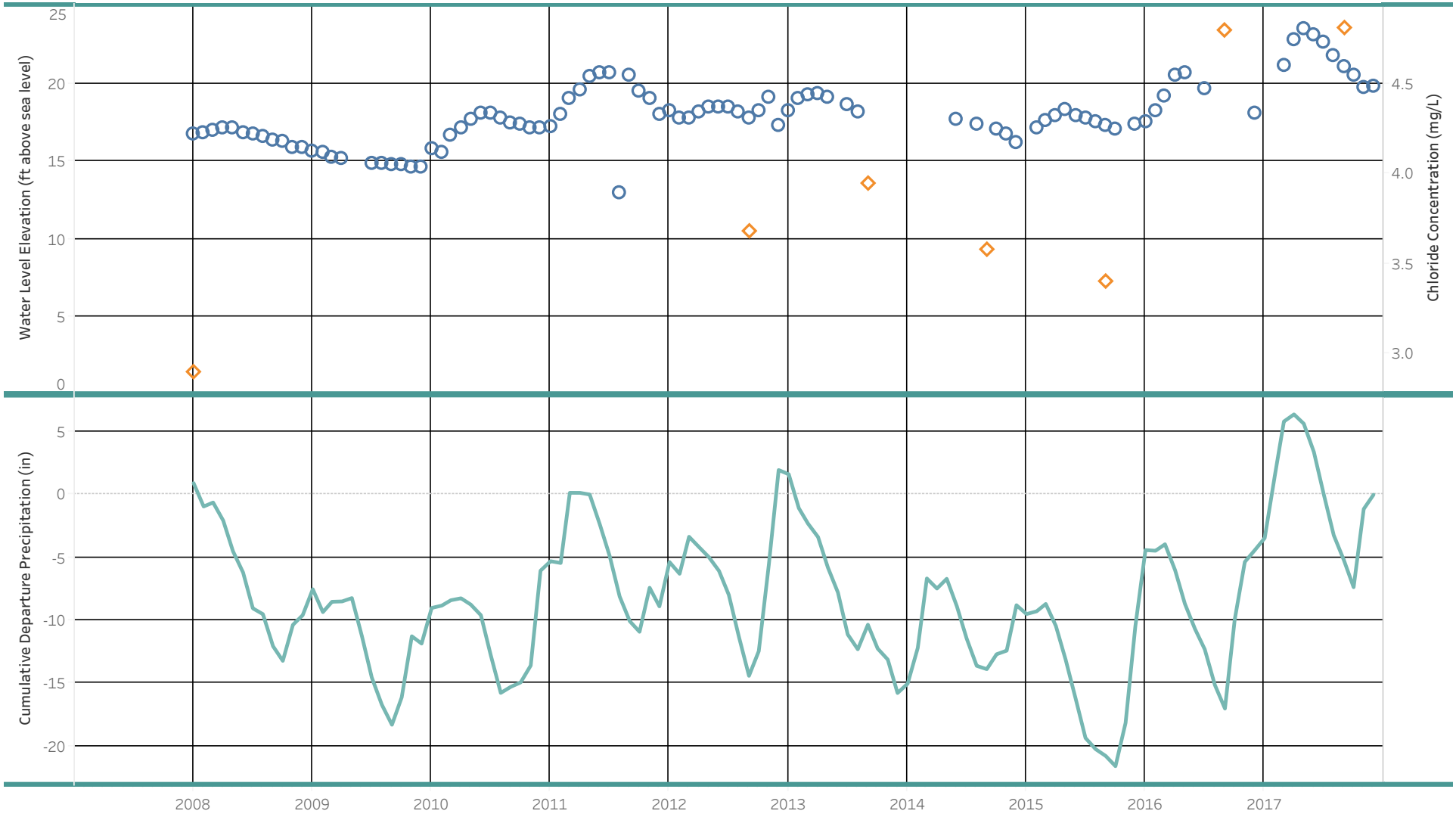


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-10E spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.08 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-17D (SLA Aquifer)

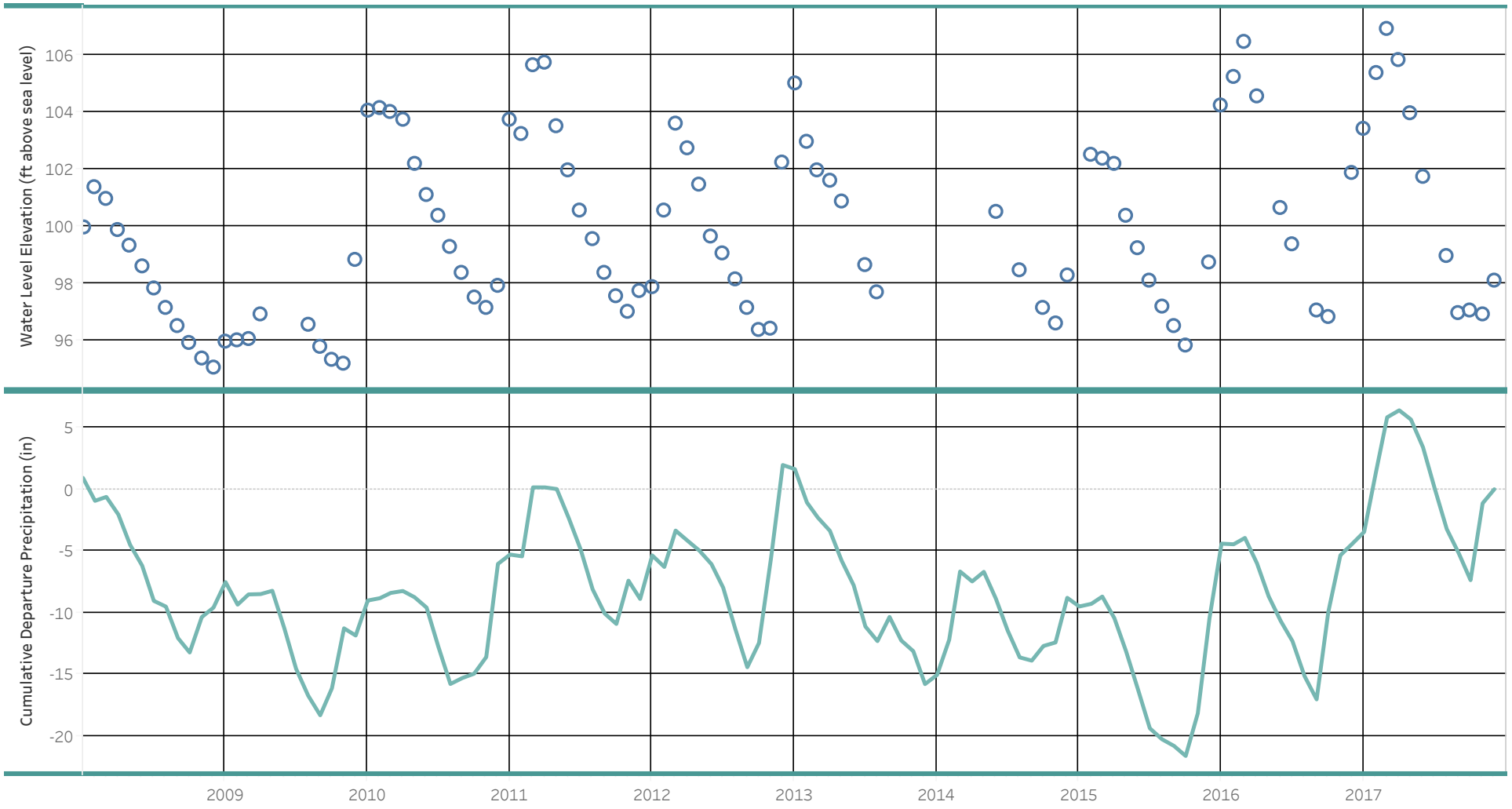


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-17D spans 10 years, which included a maximum data collection gap (in months) of: 10.4. Estimated static water level trend is 0.43 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-17G01 (PA Aquifer)

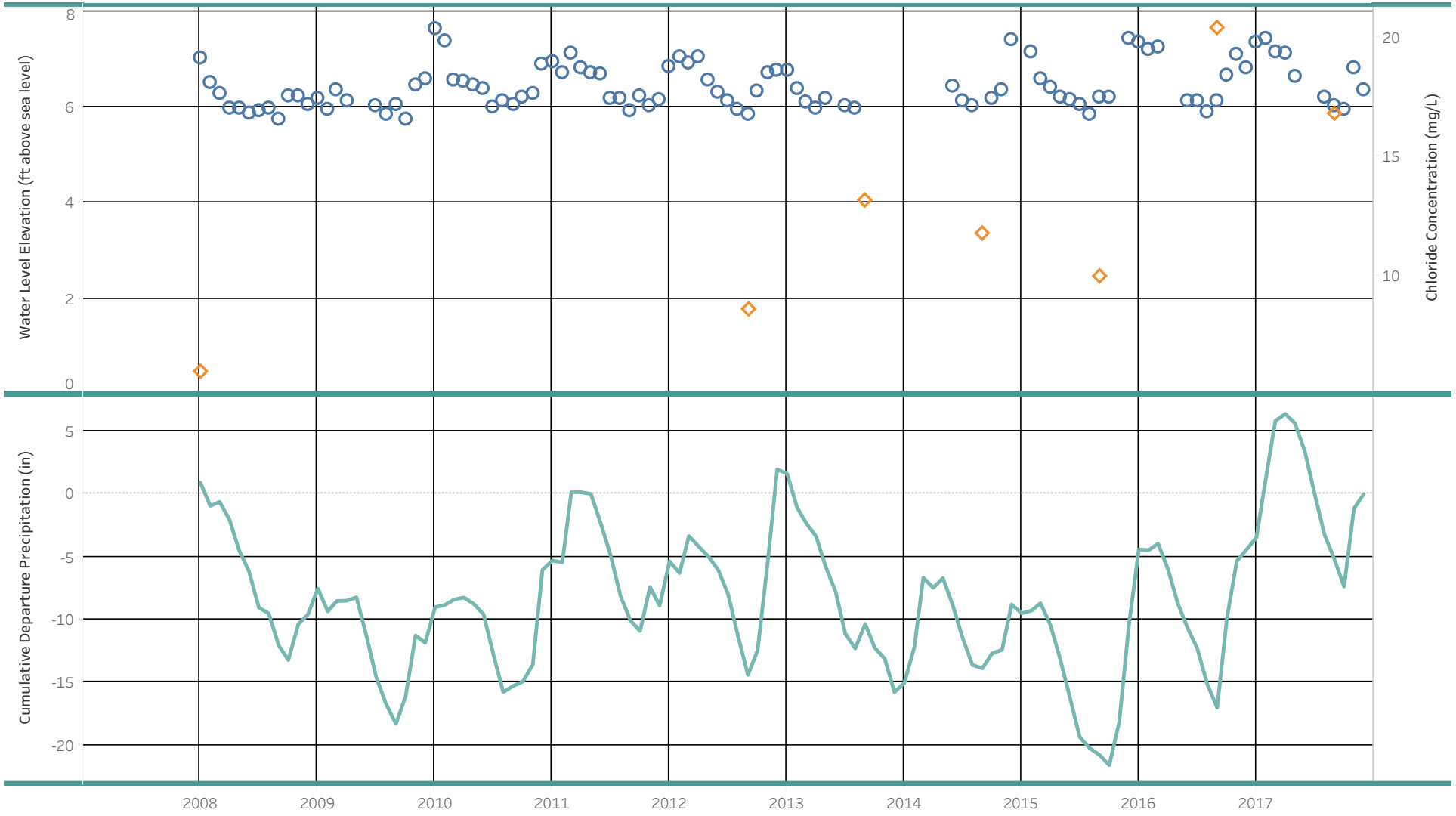


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-17G01 spans 10 years, which included a maximum data collection gap (in months) of: 10.4. Estimated static water level trend is 0.24 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 25N/02E-20D (SLA Aquifer)

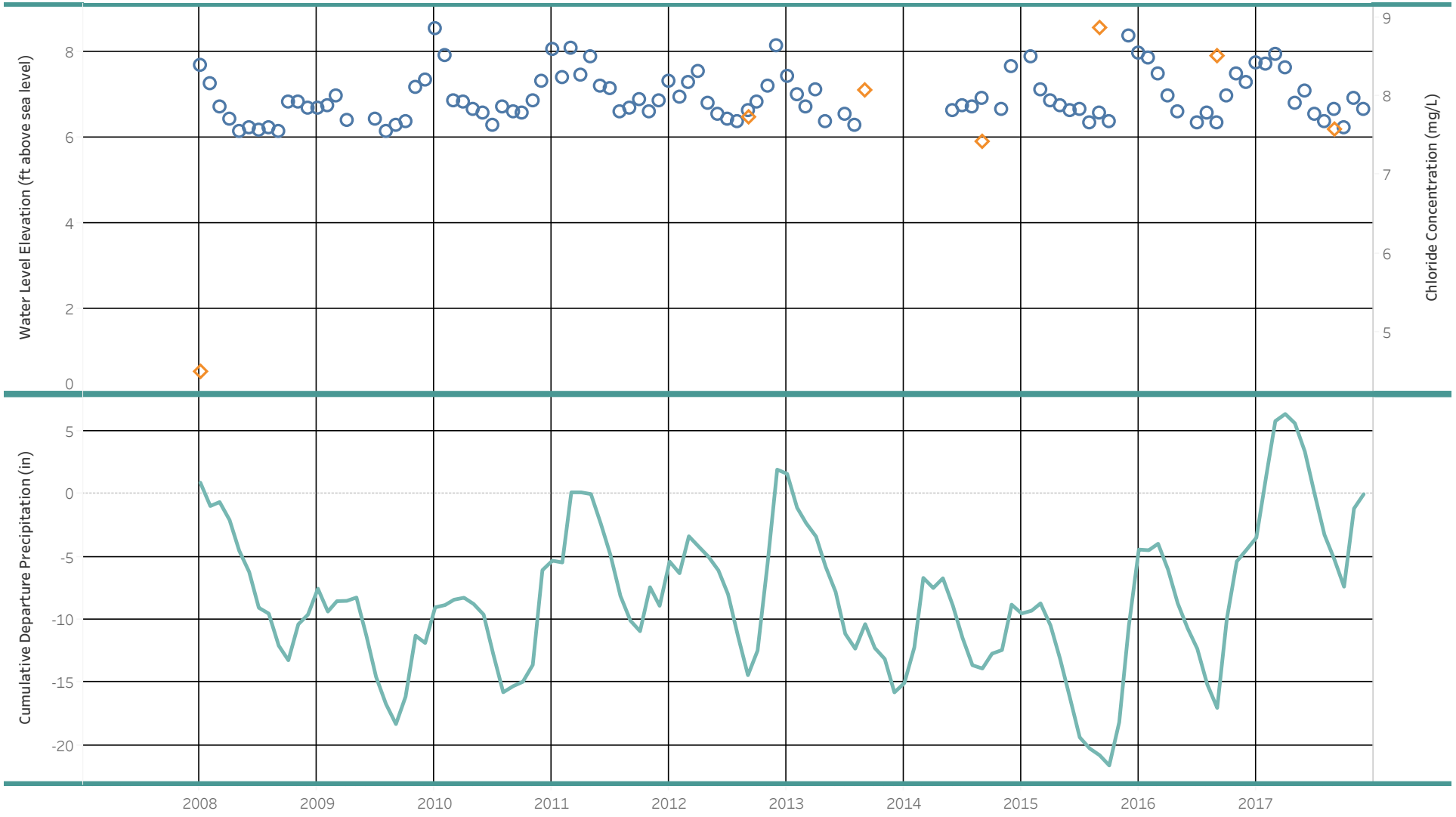


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-20D spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.04 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-20L07 (SLA Aquifer)

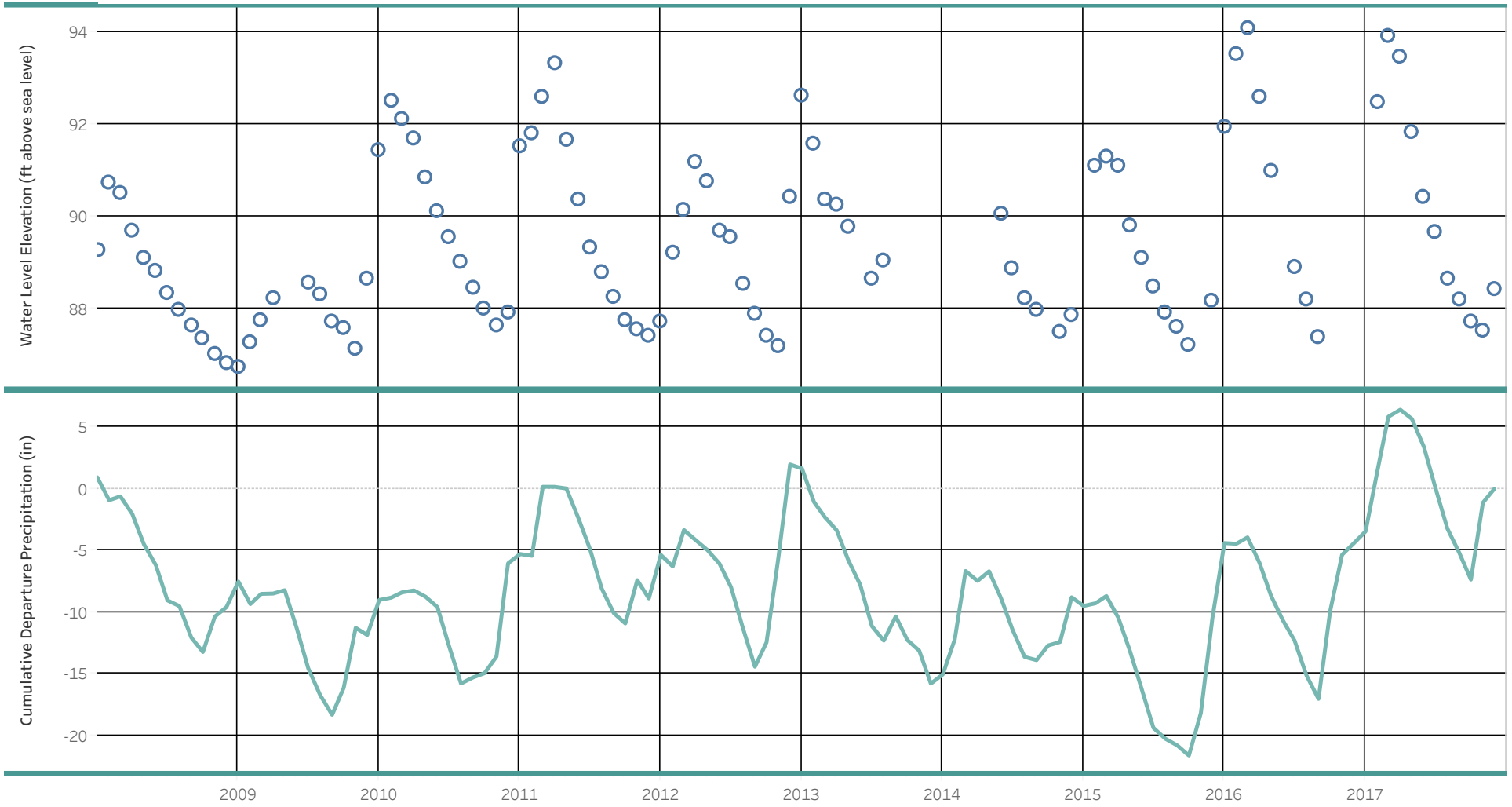


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-20L07 spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.03 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-20P2 (PA Aquifer)

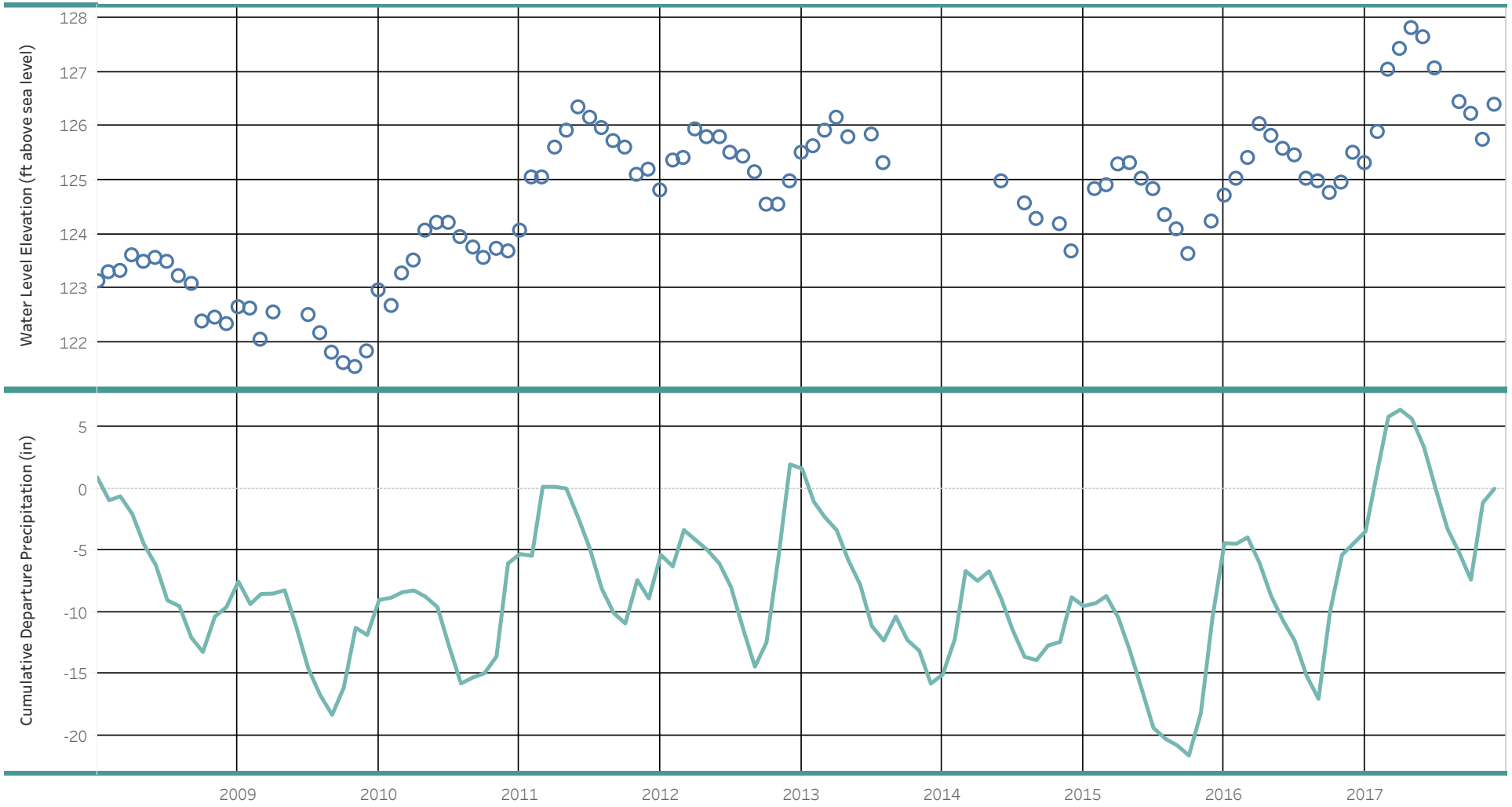


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-20P2 spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.13 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 25N/02E-21B (SPA Aquifer)

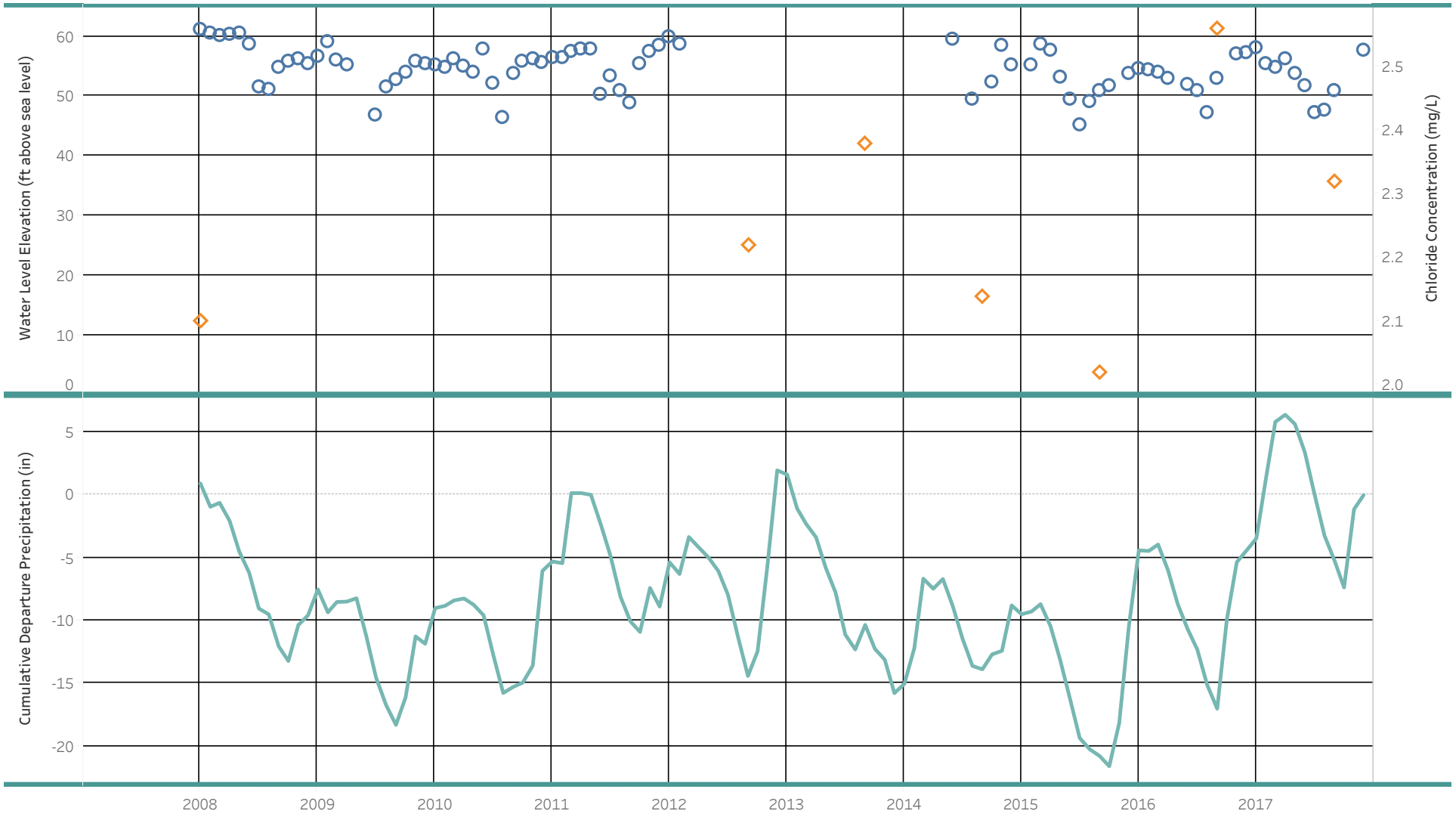


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-21B spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.33 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 25N/02E-21P03 (SLA Aquifer)

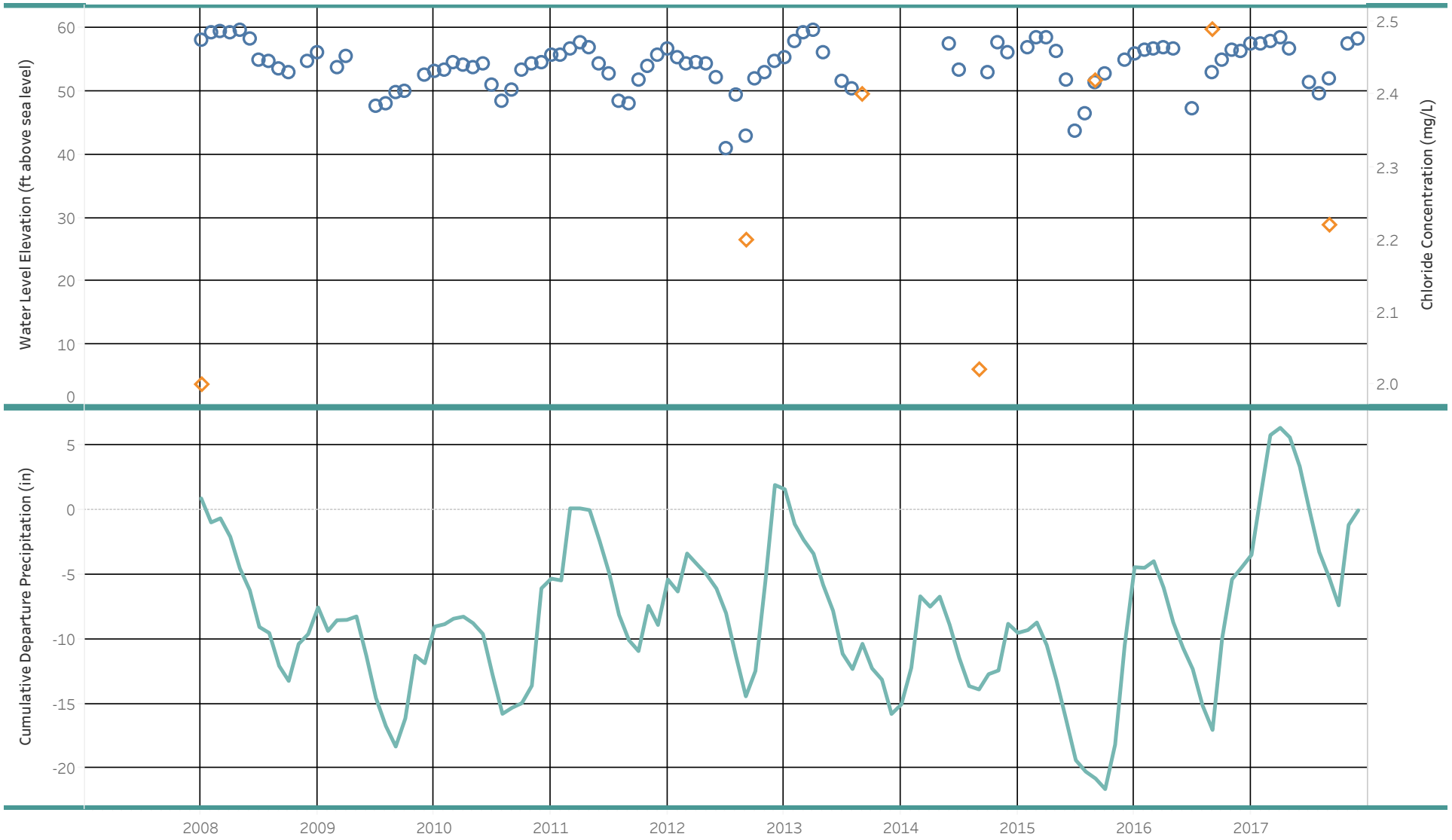


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-21P03 spans 10 years, which included a maximum data collection gap (in months) of: 28.3. Estimated static water level trend is -0.36 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-22C01 (SLA Aquifer)

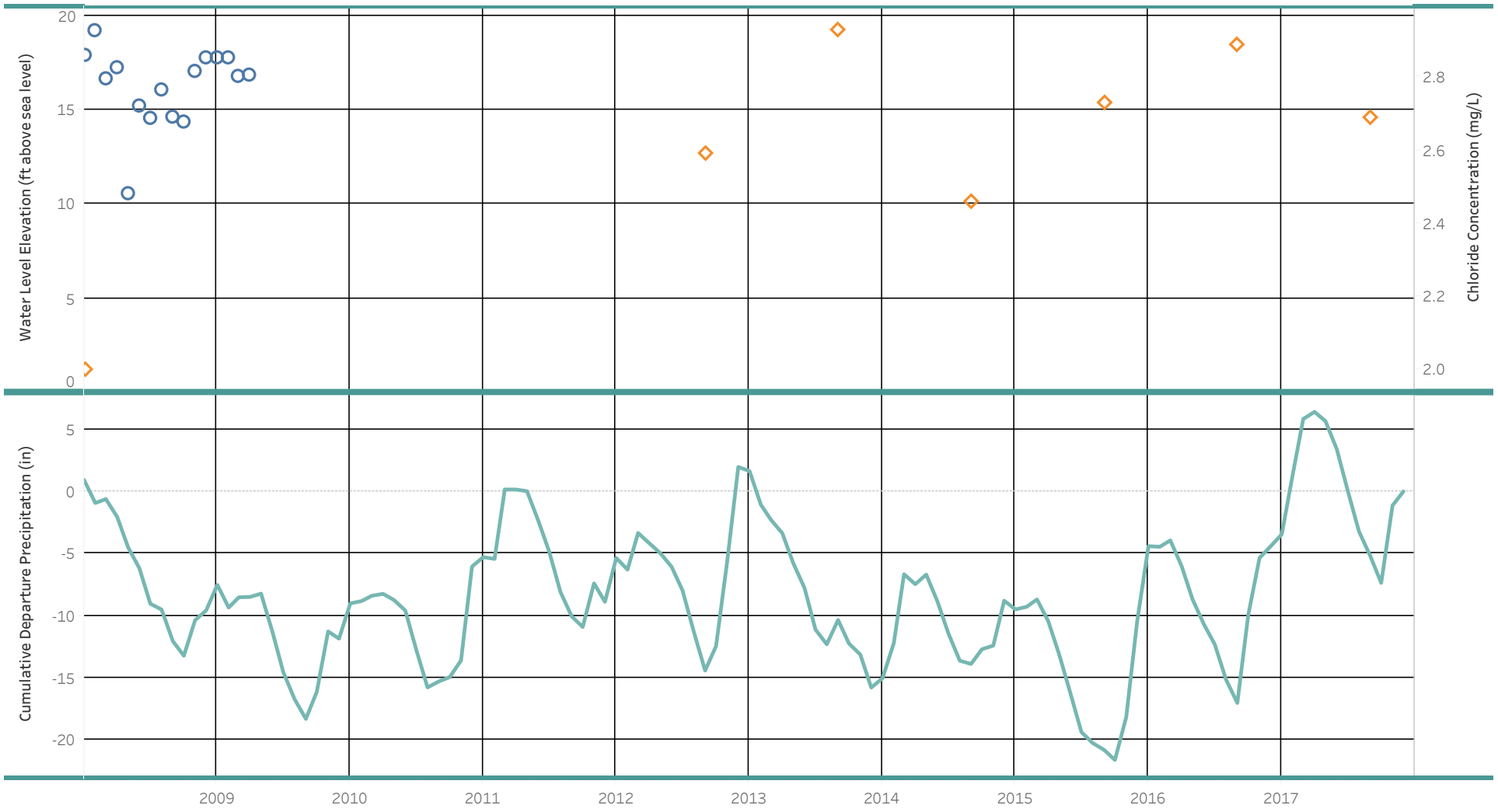


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-22C01 spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.05 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-23G (SLA Aquifer)

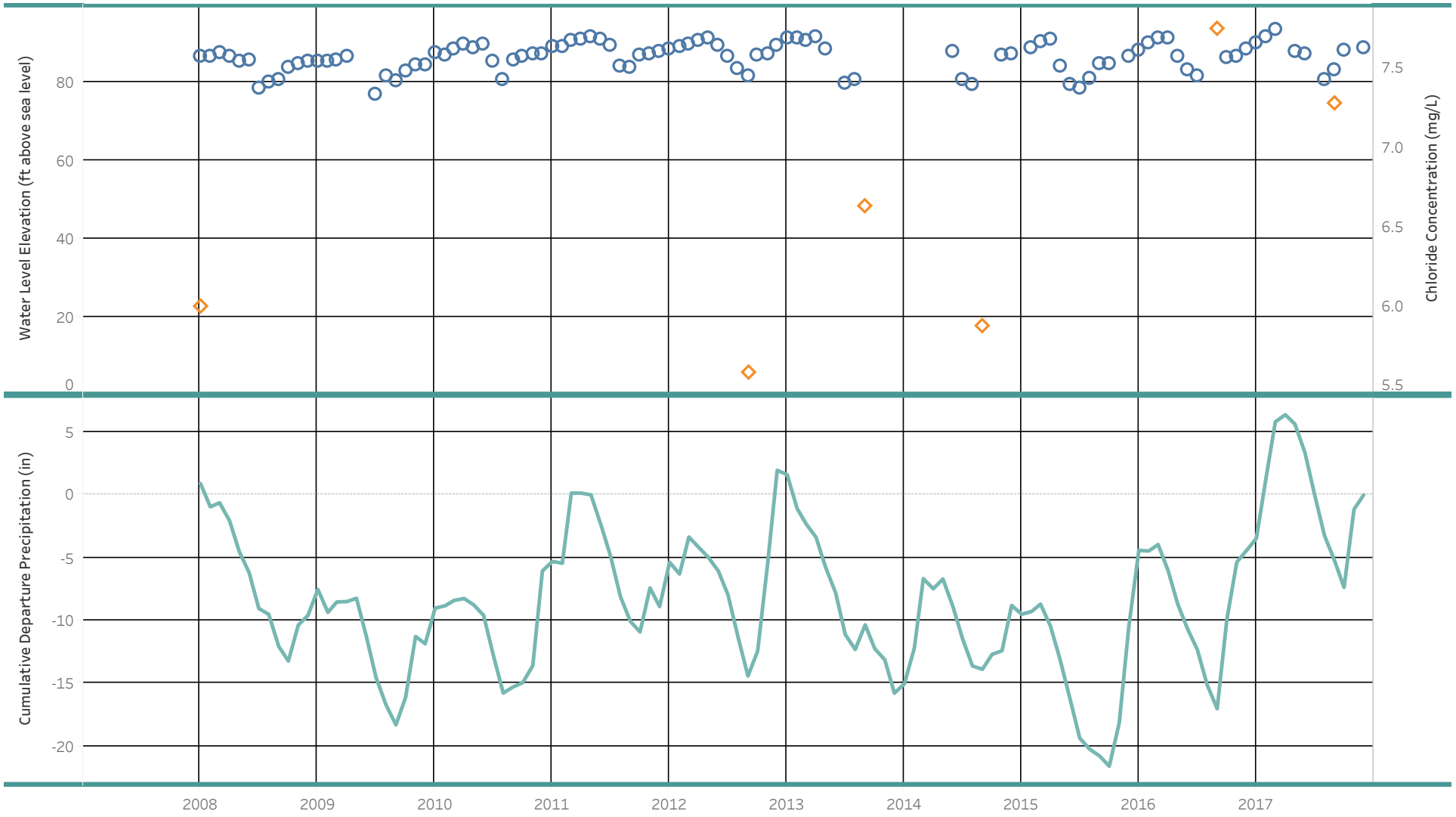


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-23G spans 1 years, which included a maximum data collection gap (in months) of: 1.4. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 1 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-23Q03 (SPA Aquifer)

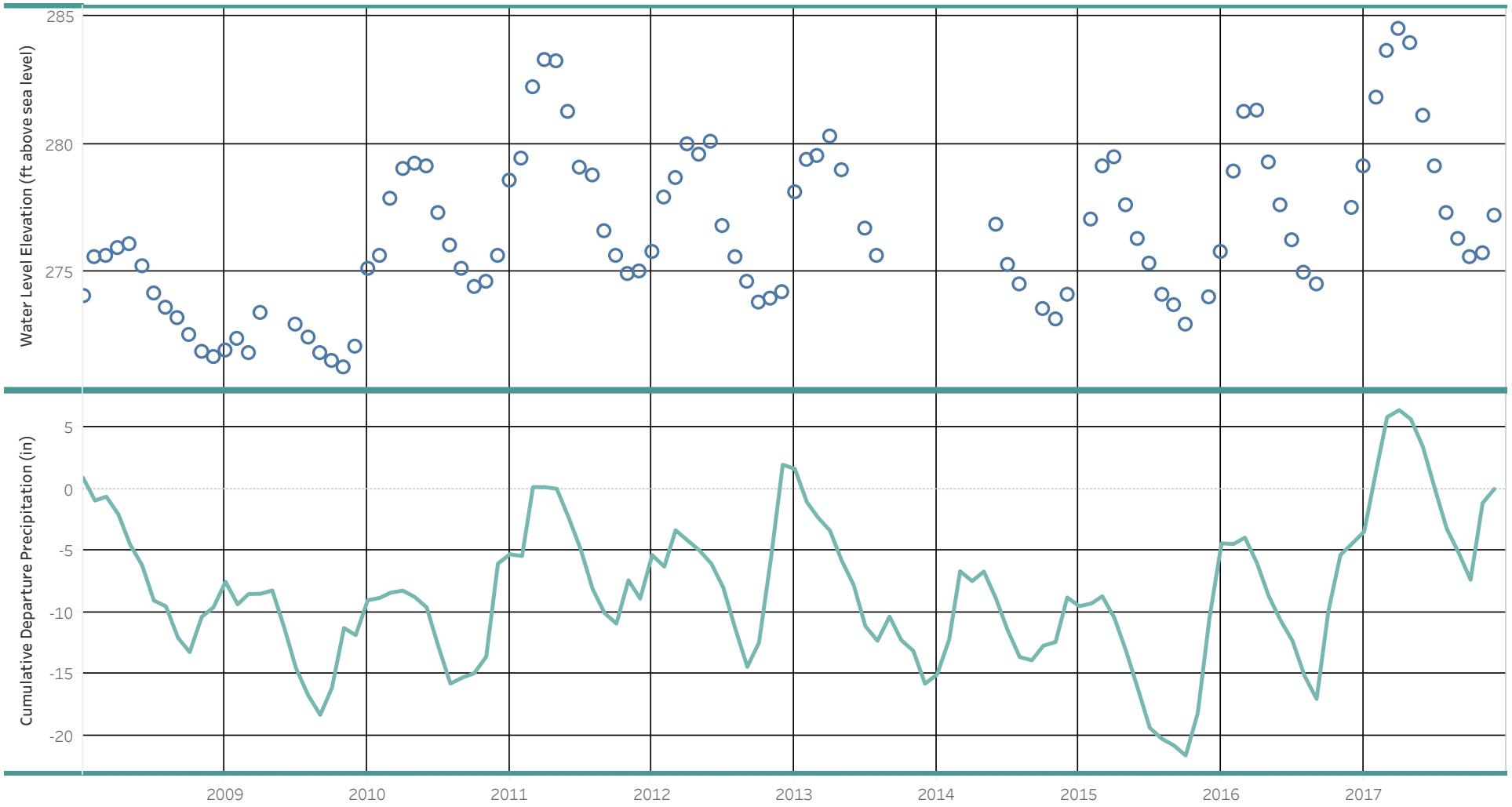


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-23Q03 spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.19 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-28N02 (PA Aquifer)

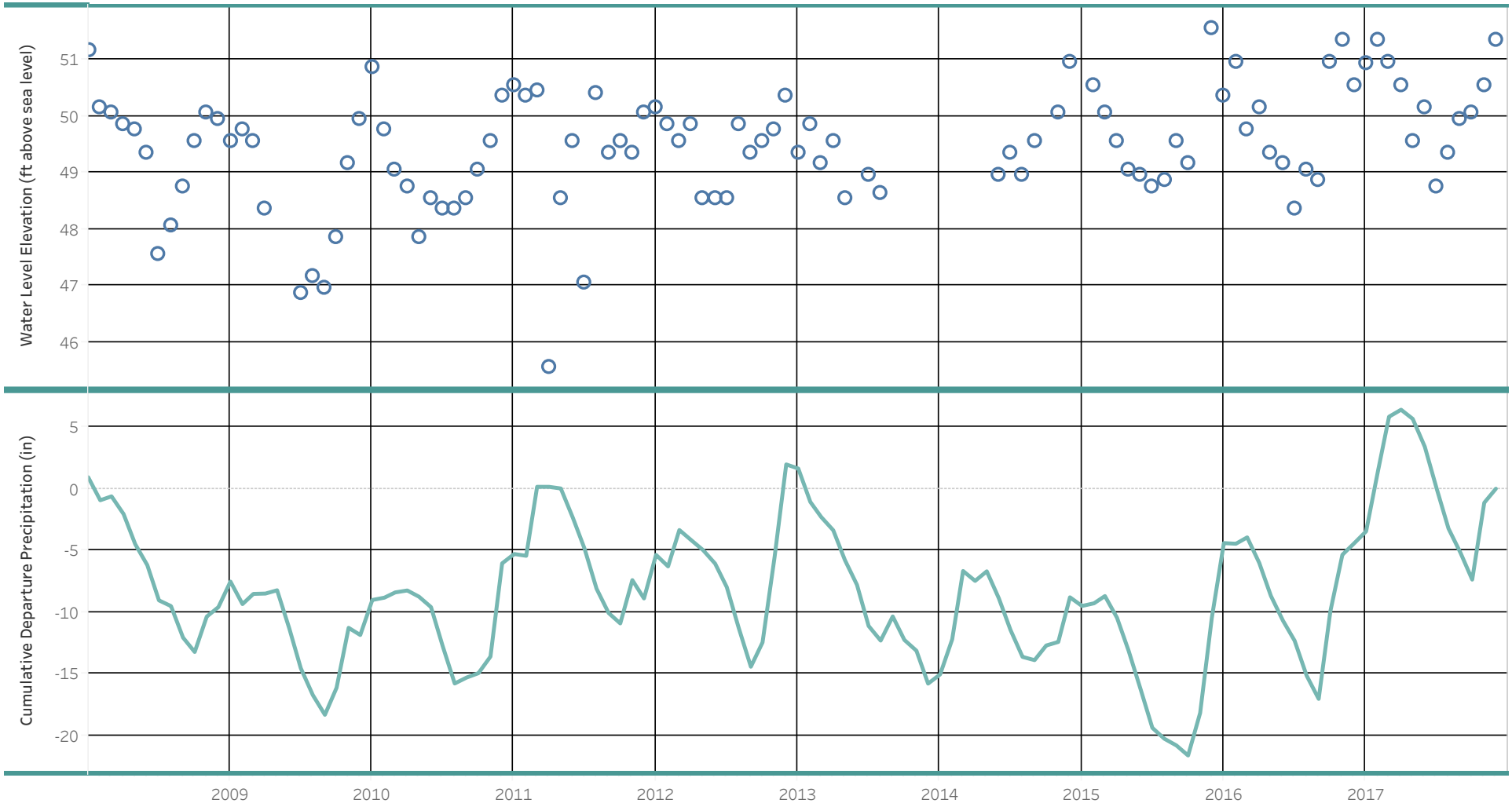


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-28N02 spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.41 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 25N/02E-29C (SLA Aquifer)

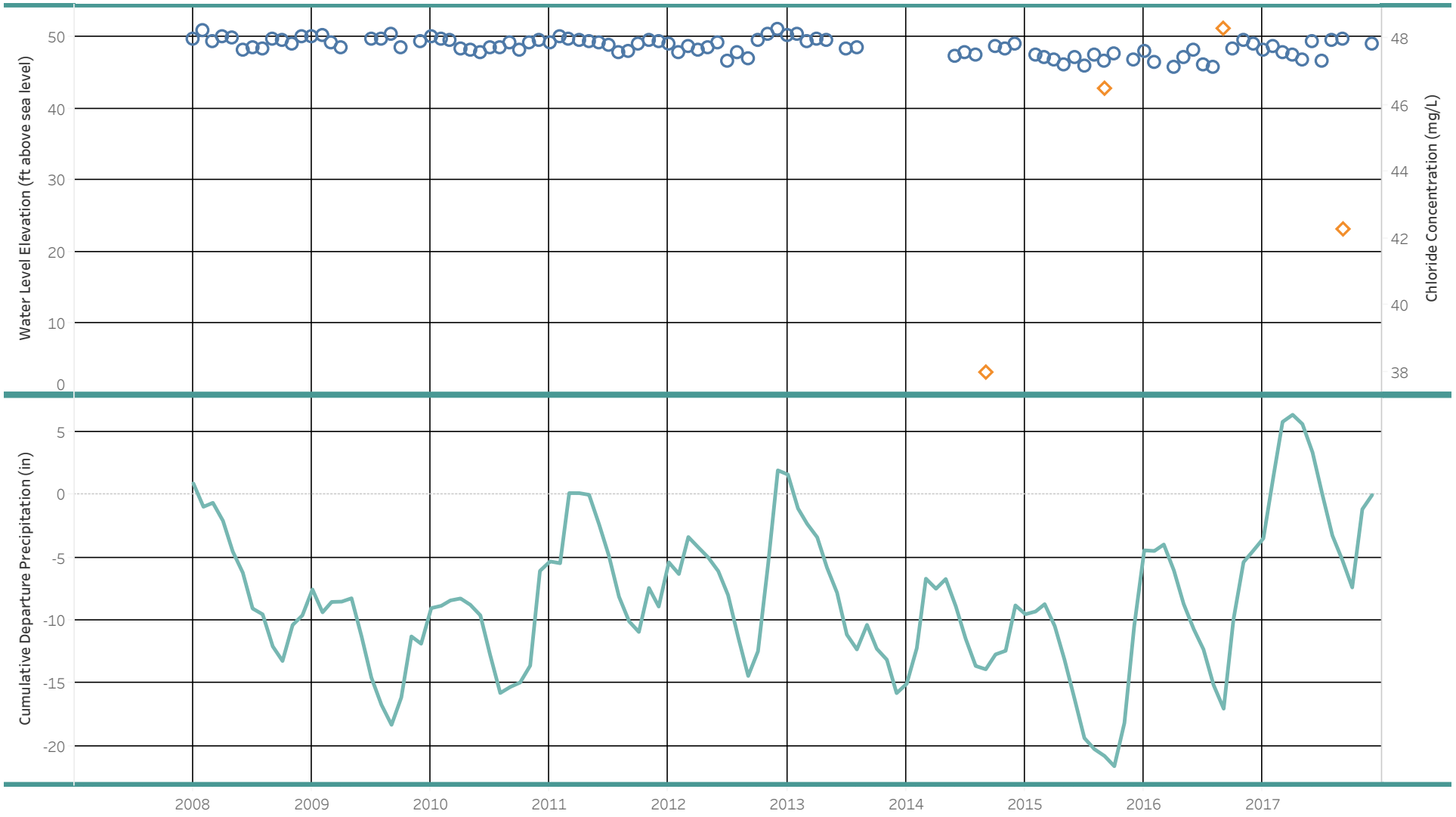


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-29C spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.12 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 25N/02E-29P01 (GMA Aquifer)

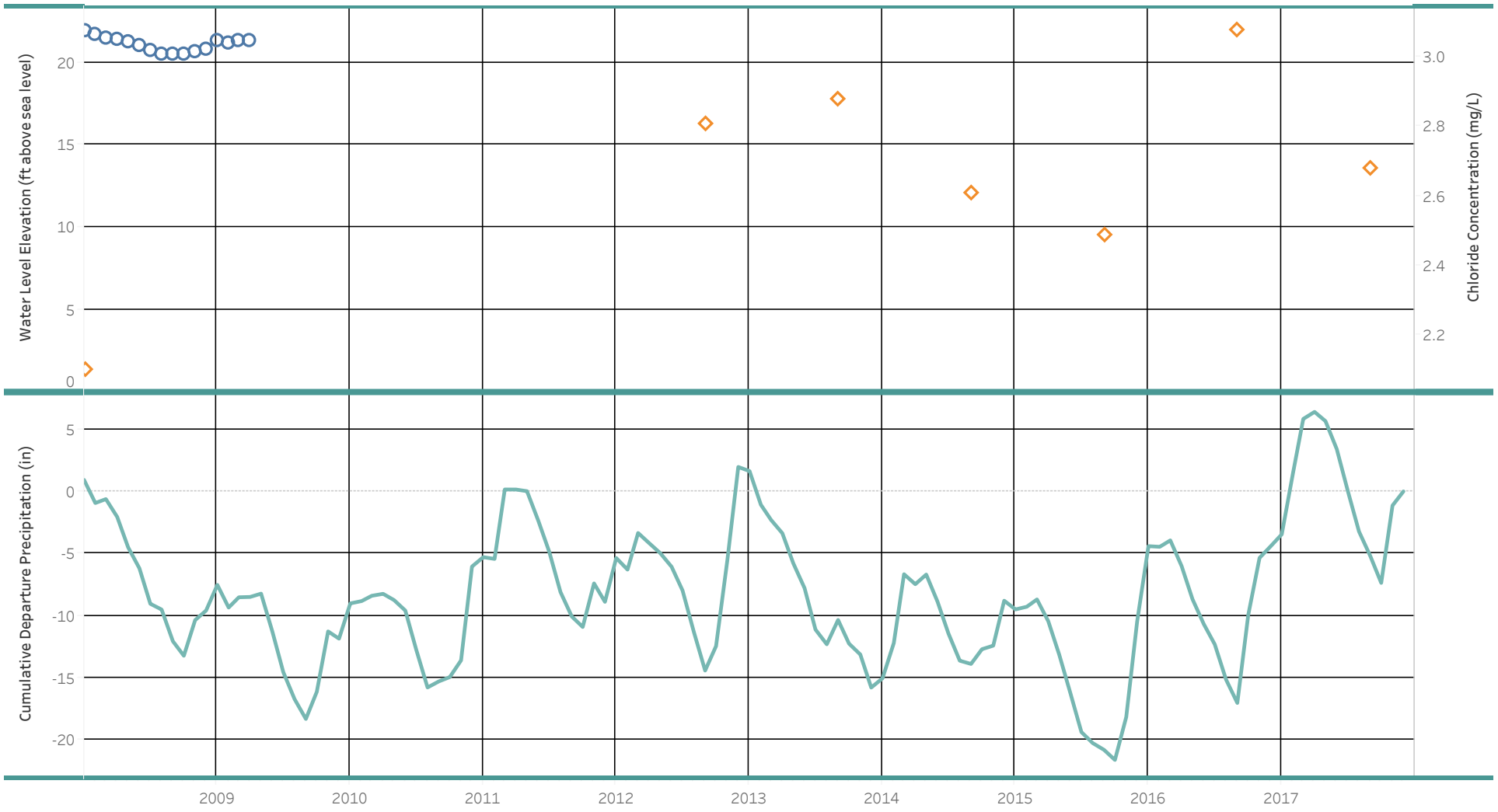


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-29P01 spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is -0.22 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-32C01 (SLA Aquifer)

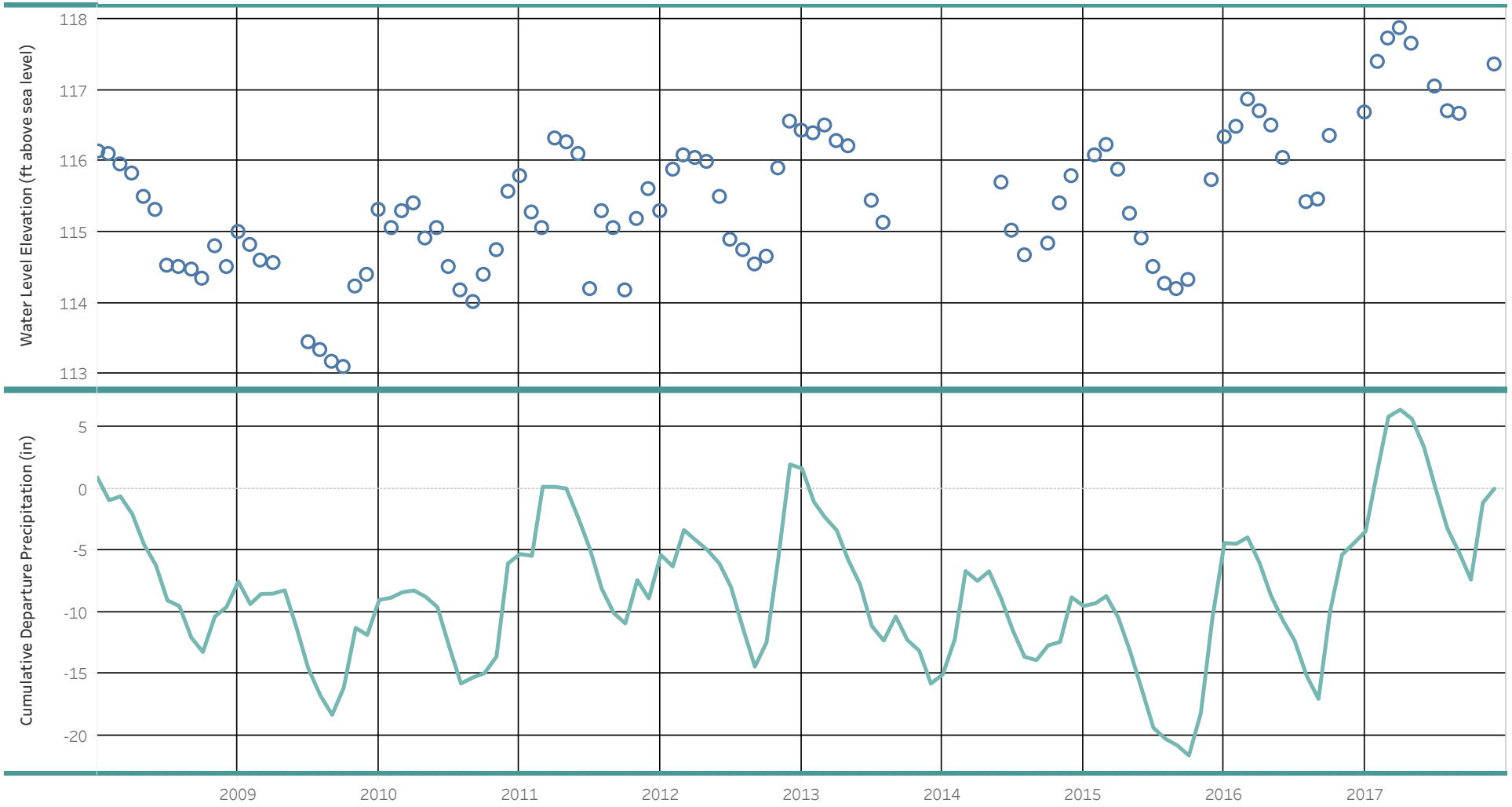


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-32C01 spans 1 years, which included a maximum data collection gap (in months) of: 1.4. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 1 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-33B02 (SPA Aquifer)

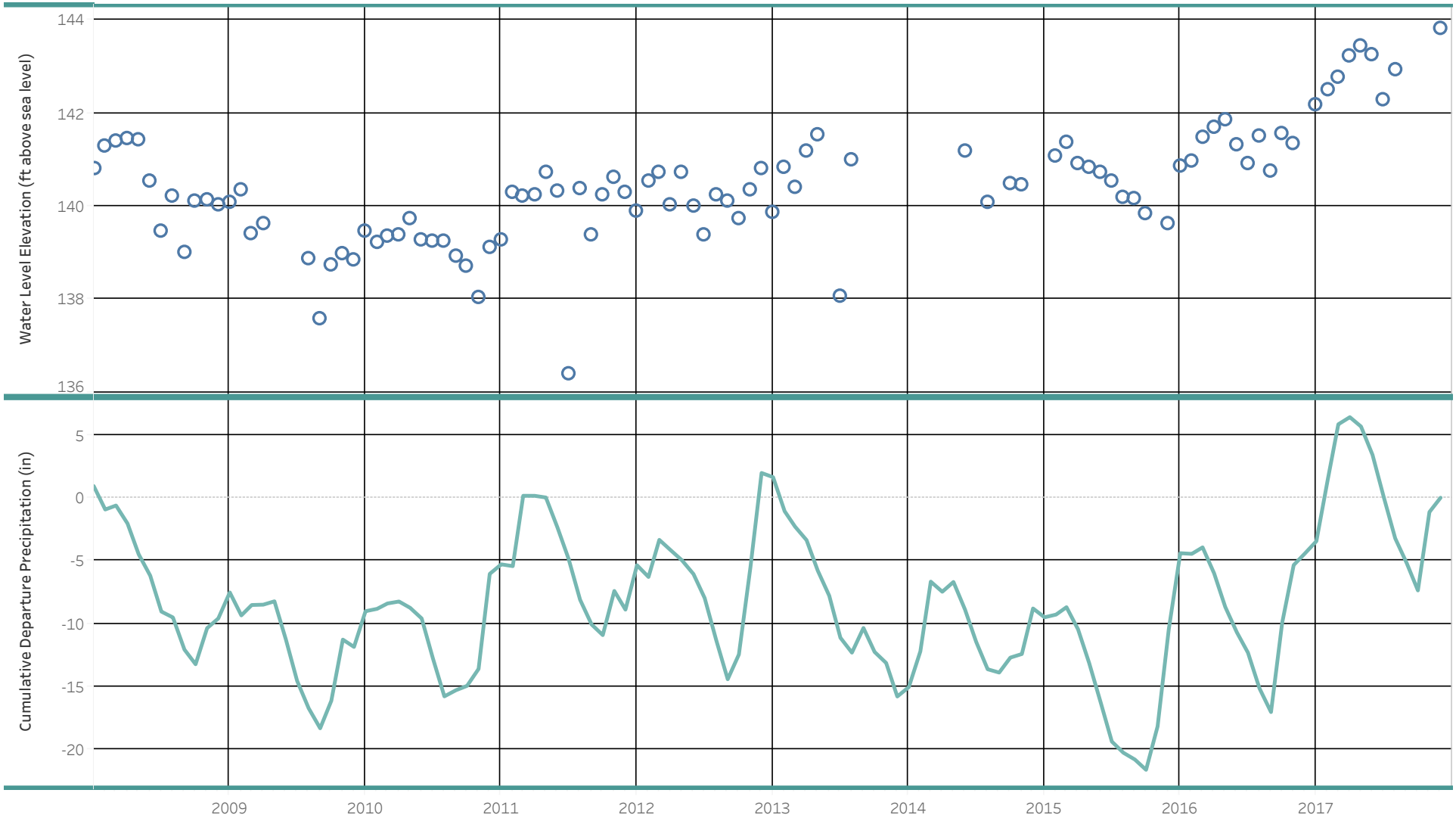


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-33B02 spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.19 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 25N/02E-33F01 (SLA Aquifer)

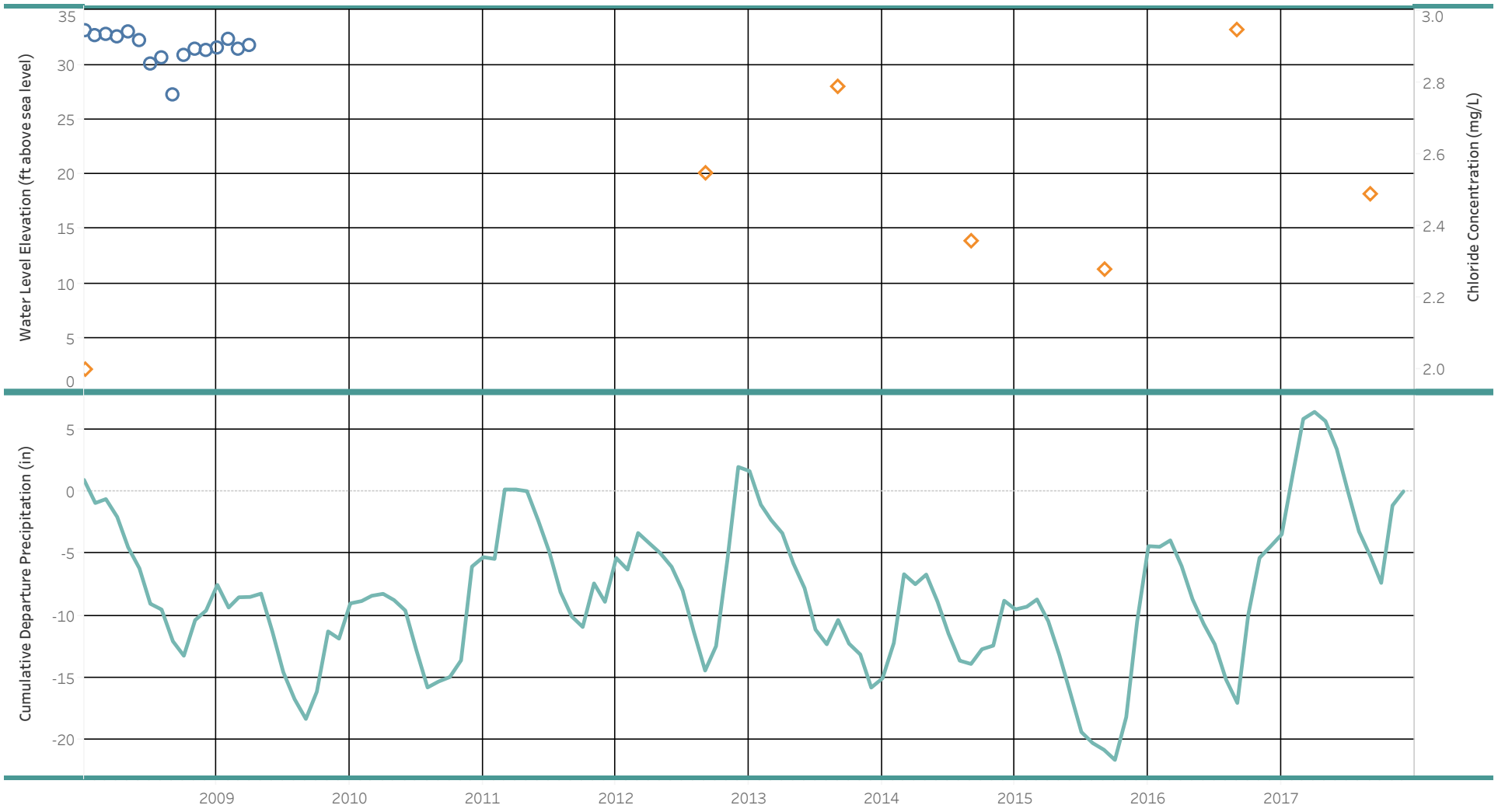


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-33F01 spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.26 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 25N/02E-34H02 (GMA Aquifer)

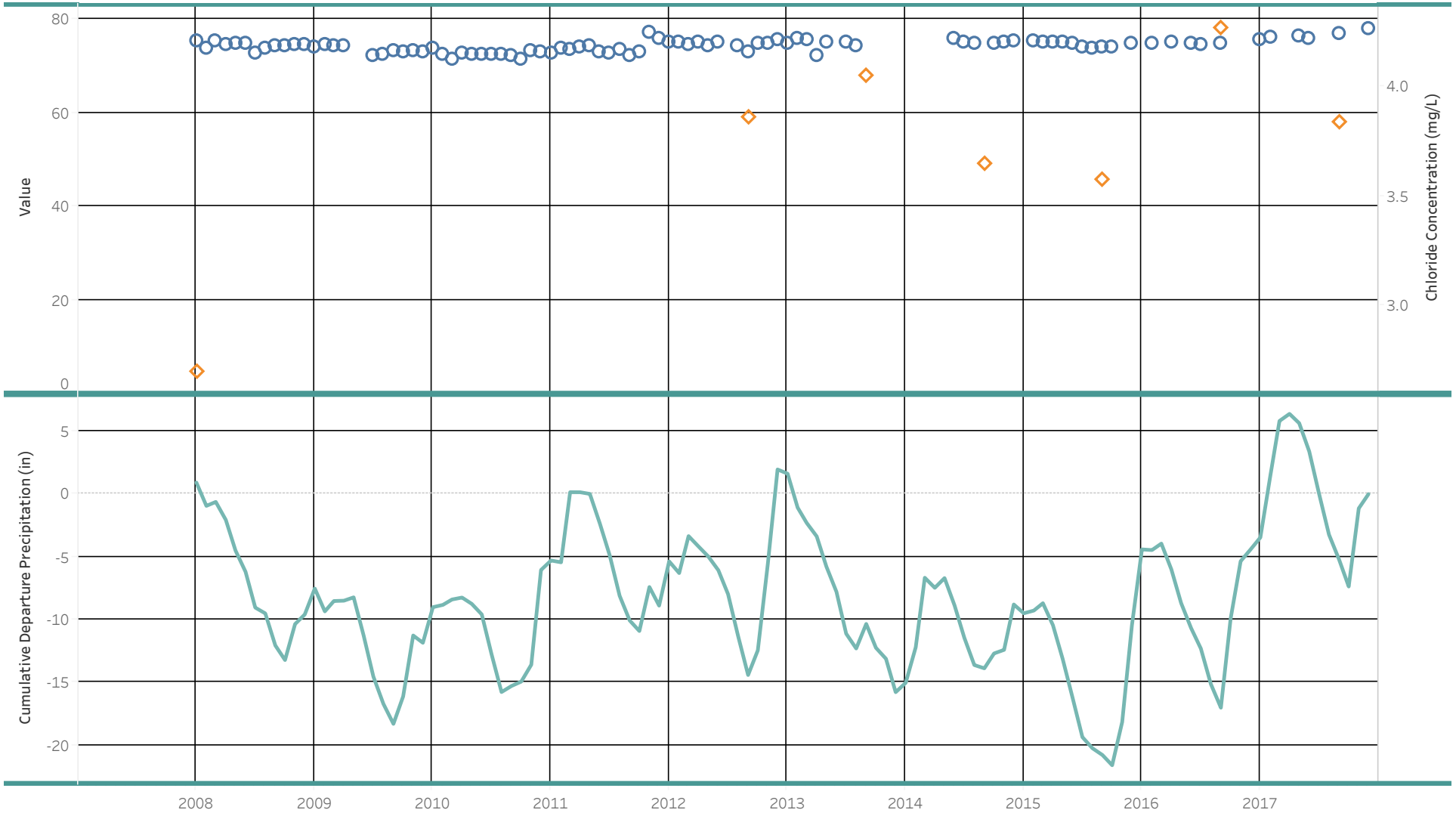


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-34H02 spans 1 years, which included a maximum data collection gap (in months) of: 1.2. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 1 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-34J (SLA Aquifer)

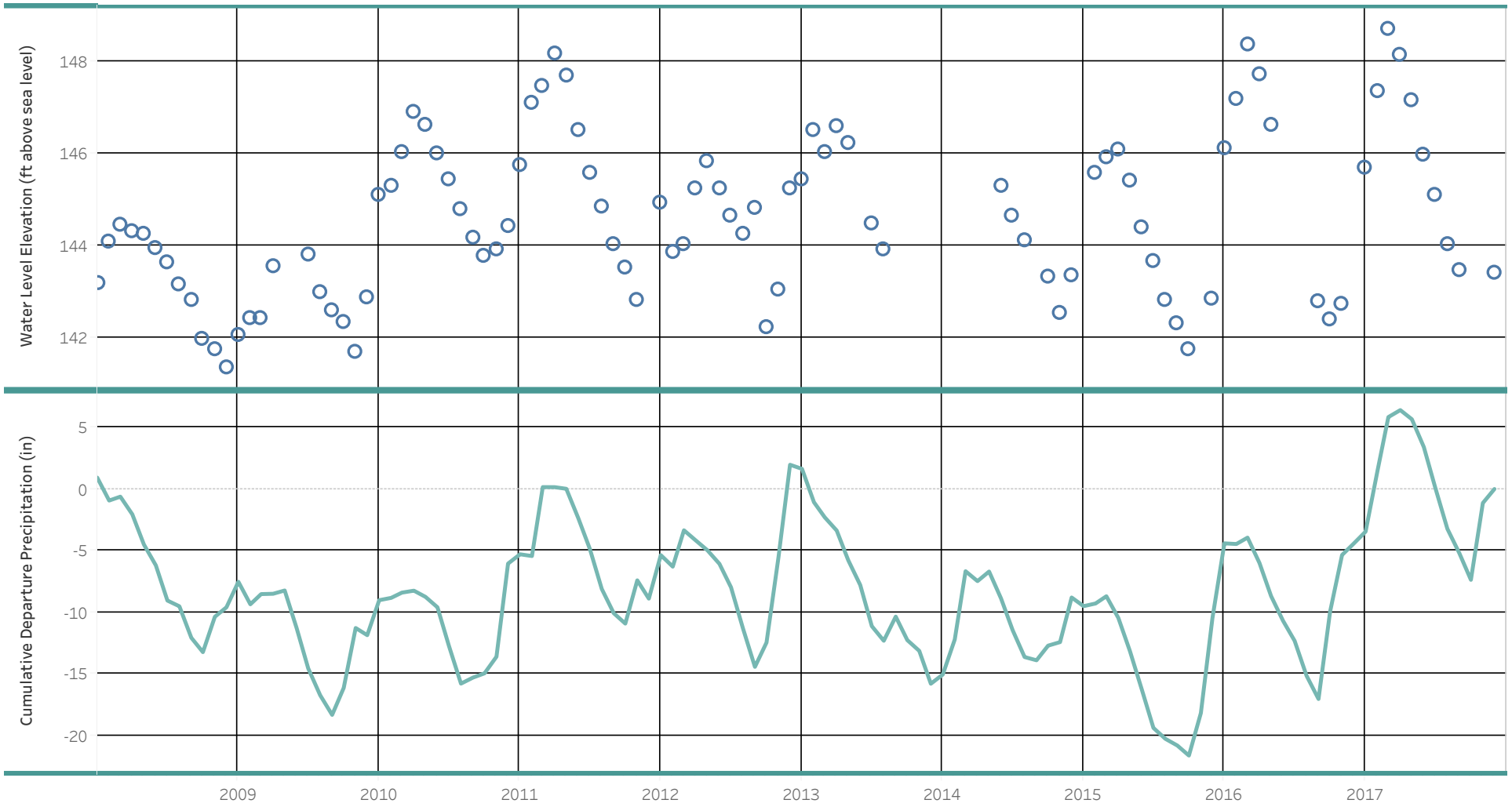


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-34J spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.24 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 25N/02E-35M03 (PA Aquifer)

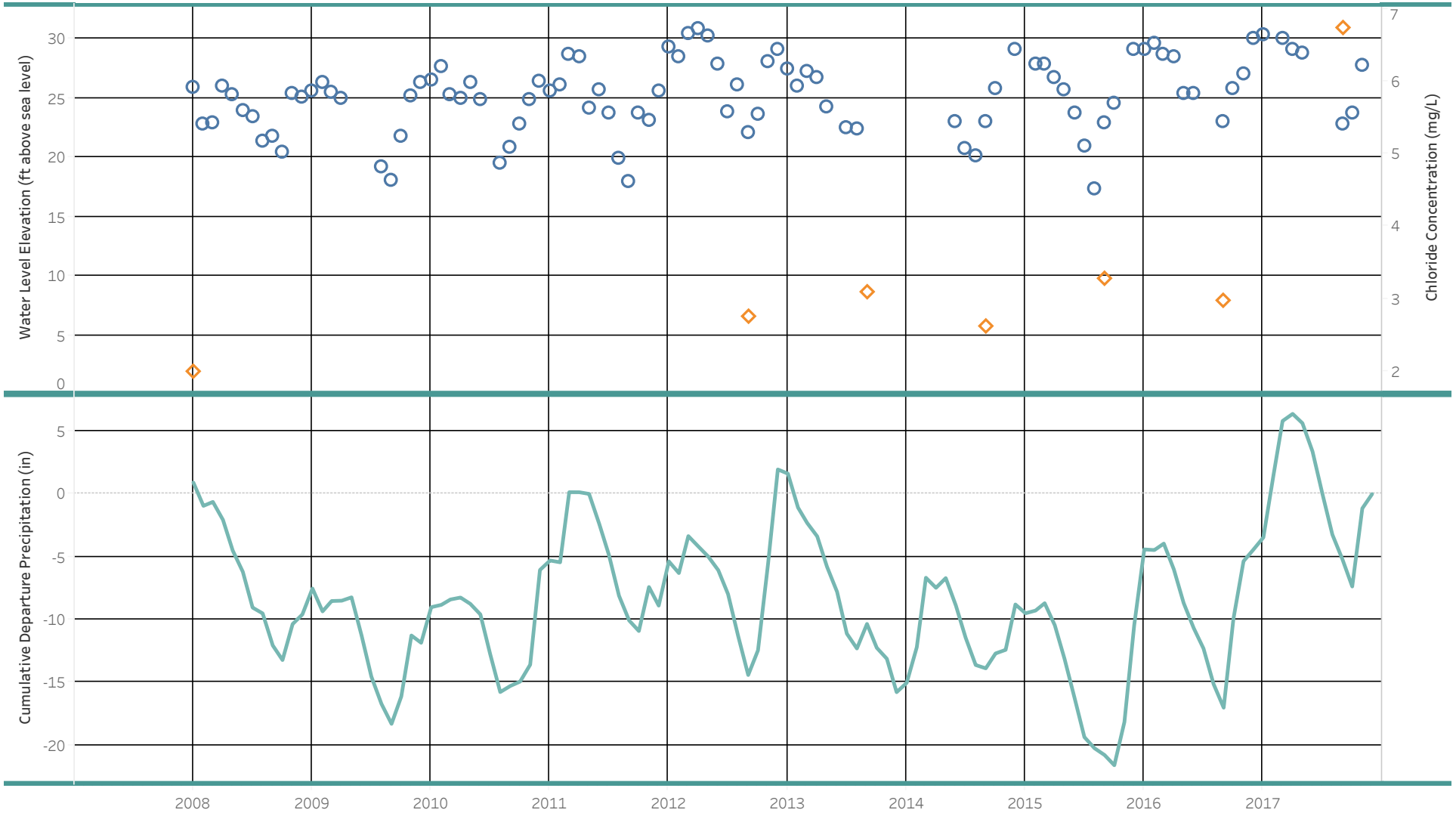


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 25N/02E-35M03 spans 10 years, which included a maximum data collection gap (in months) of: 10.4. Estimated static water level trend is 0.17 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - 26N/02E-28B03 (GMA Aquifer)

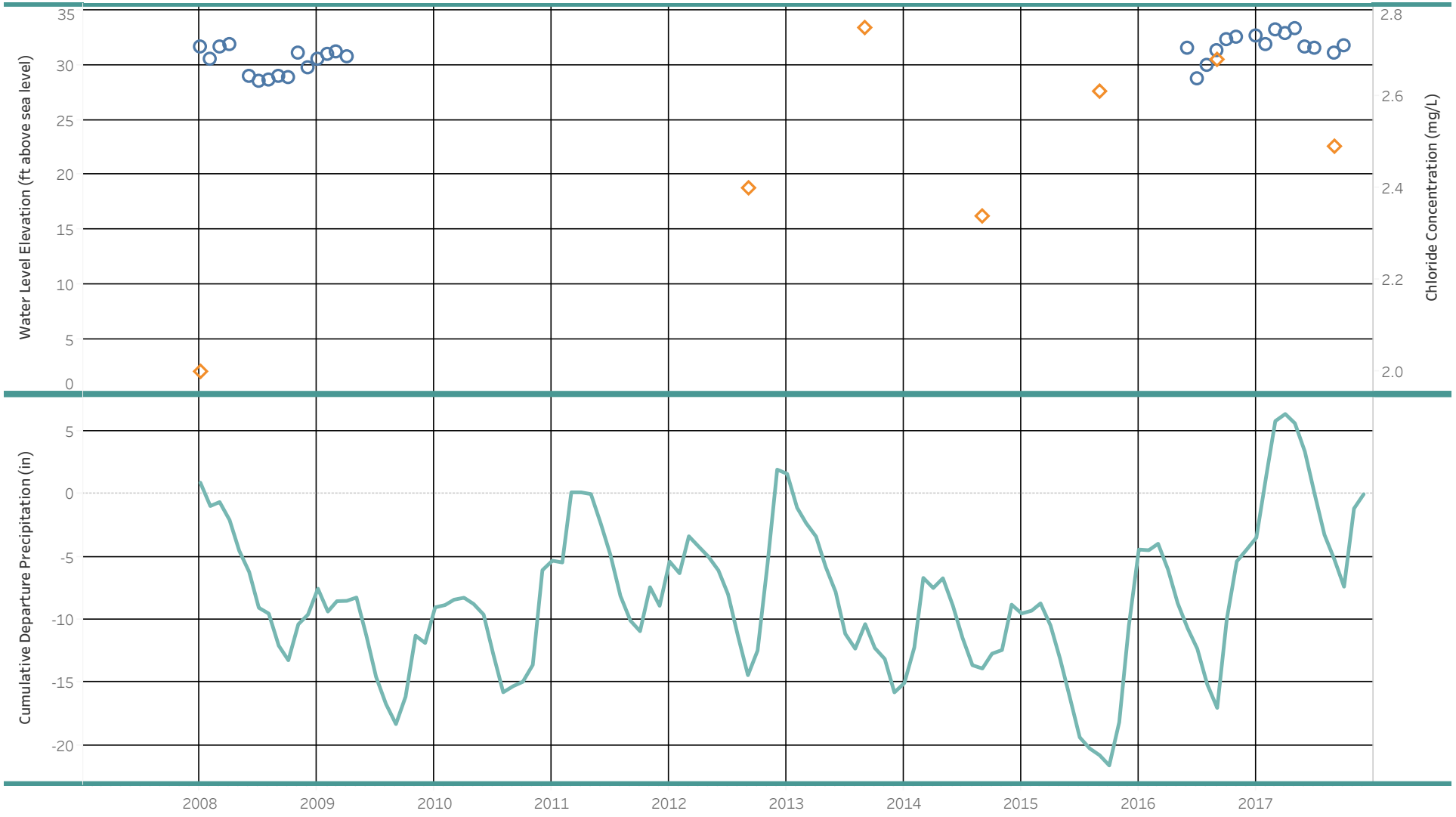


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 26N/02E-28B03 spans 10 years, which included a maximum data collection gap (in months) of: 10.4. Estimated static water level trend is 0.3 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 26N/02E-28G01 (SLA Aquifer)

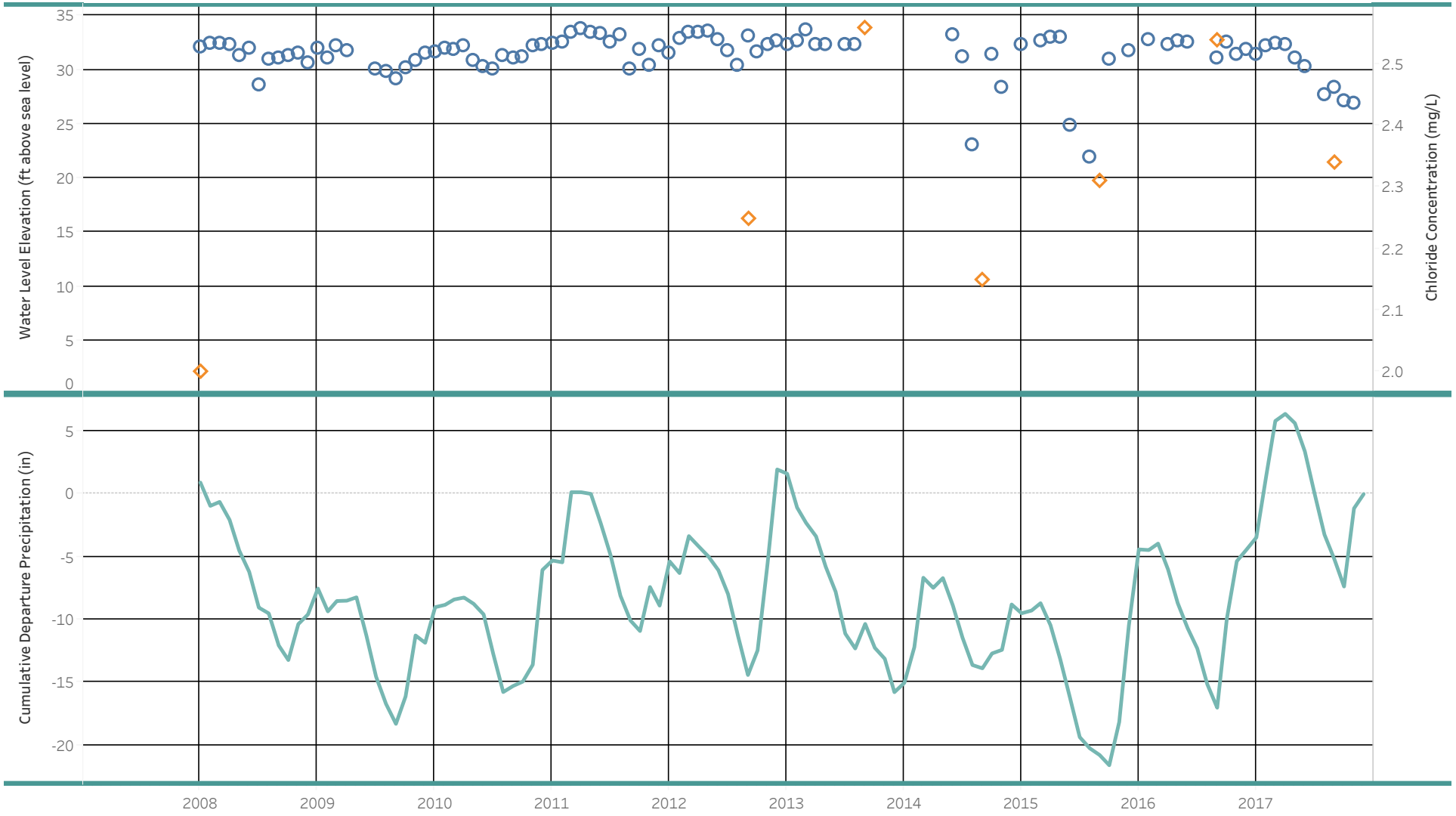


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 26N/02E-28G01 spans 10 years, which included a maximum data collection gap (in months) of: 87.5. Estimated static water level trend is 0.18 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - 26N/02E-34R01 (SLA Aquifer)

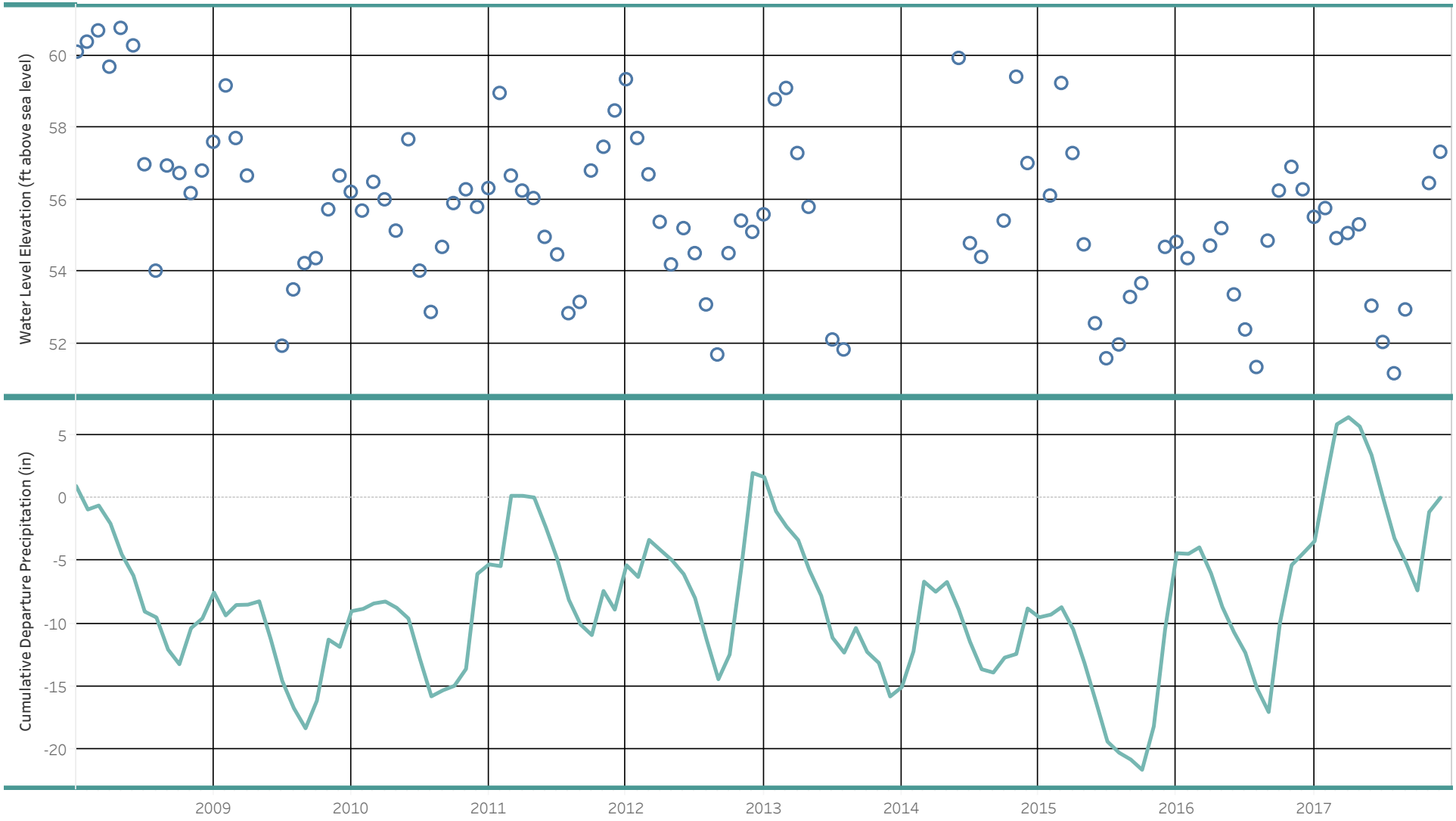


This chart displays a summary of water level data presented as a monthly average.
Static water level data for 26N/02E-34R01 spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is -0.13 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - Bainbridge Island Landfill (SLA Aquifer)

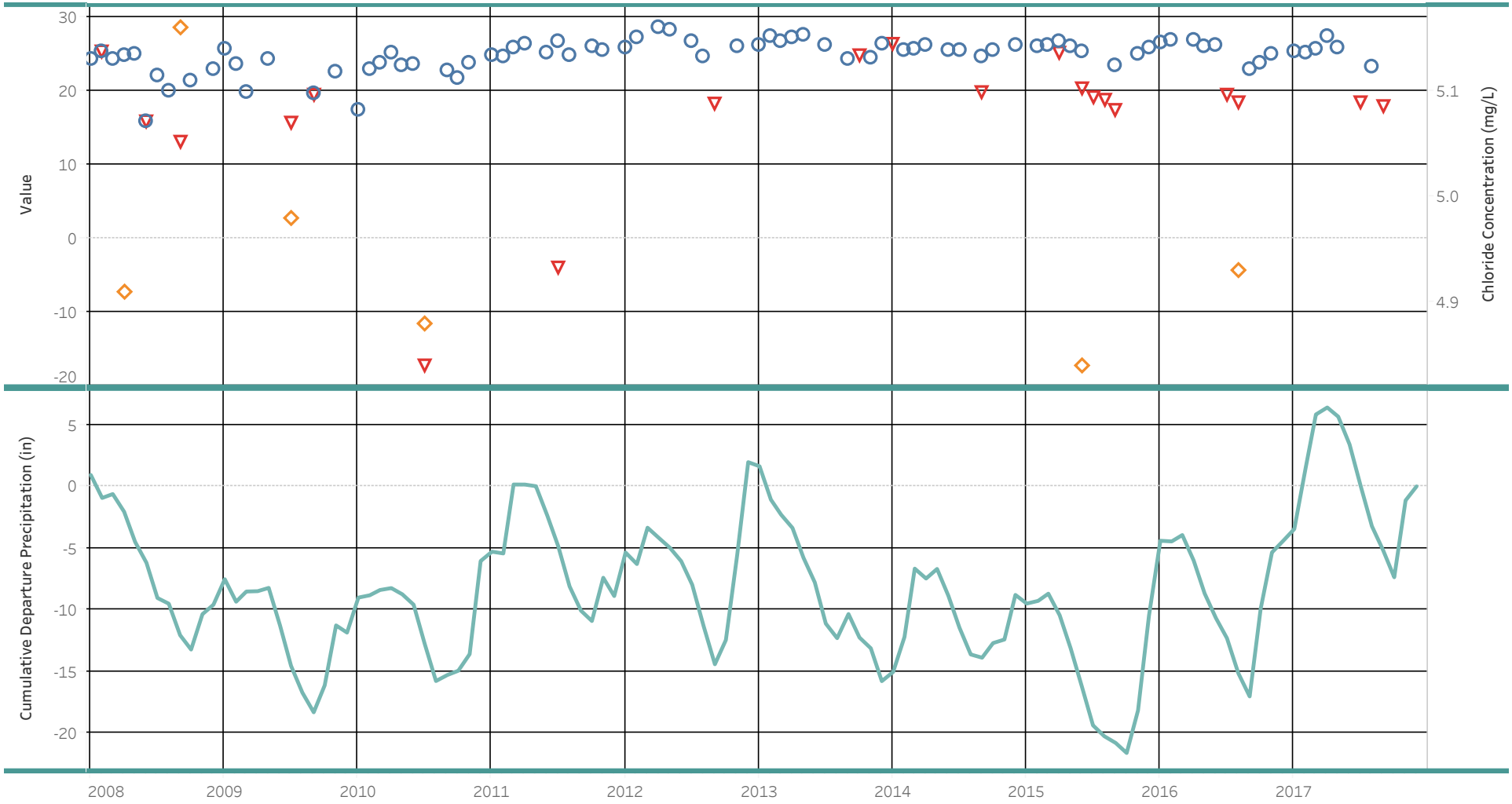


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Bainbridge Island Landfill spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is -0.31 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - Battle Point Park (GMA Aquifer)

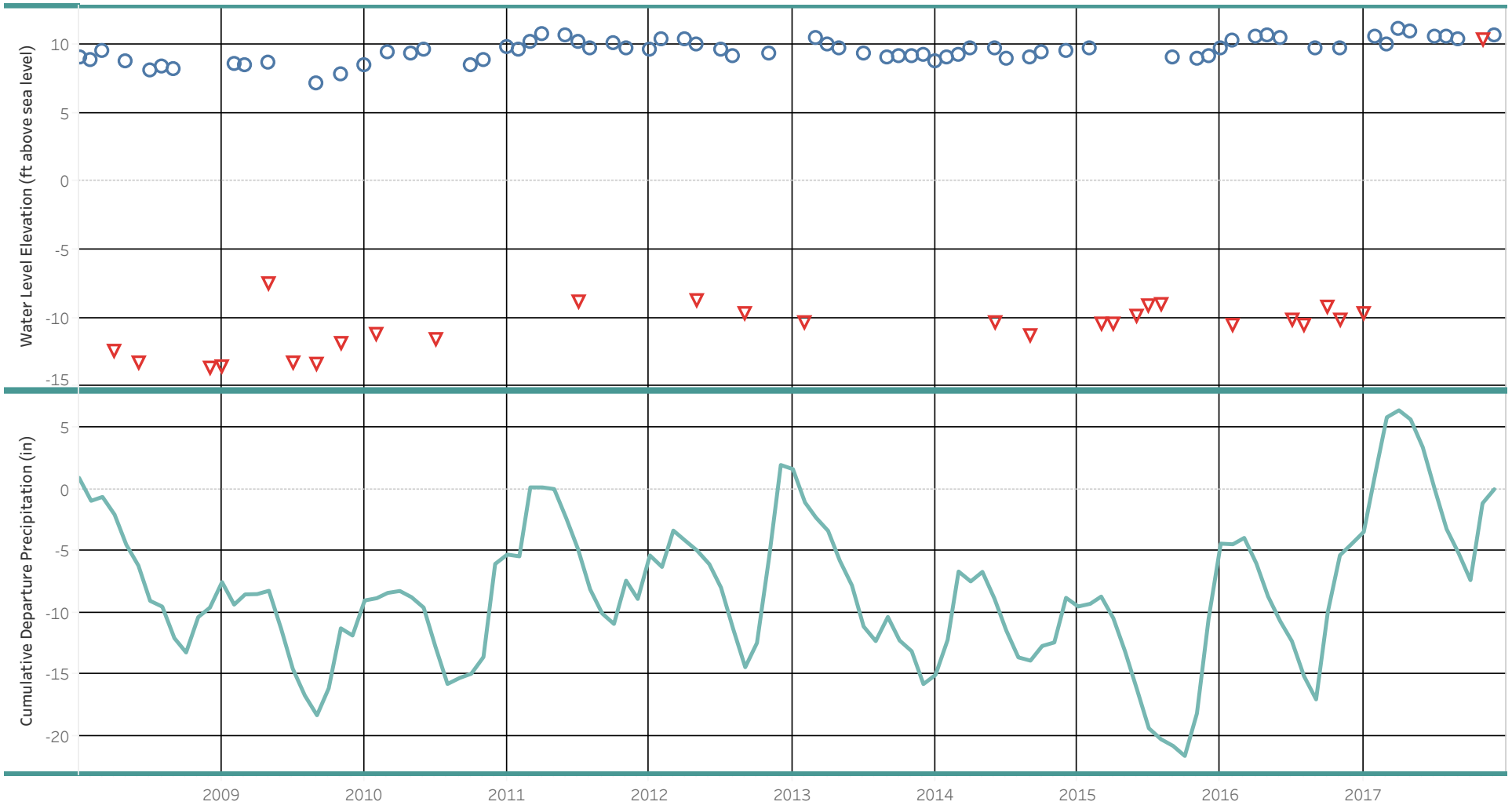


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Battle Point Park spans 10 years, which included a maximum data collection gap (in months) of: 4.6. Estimated static water level trend is 0.36 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - Bill Point Water Well 3 (SLA Aquifer)

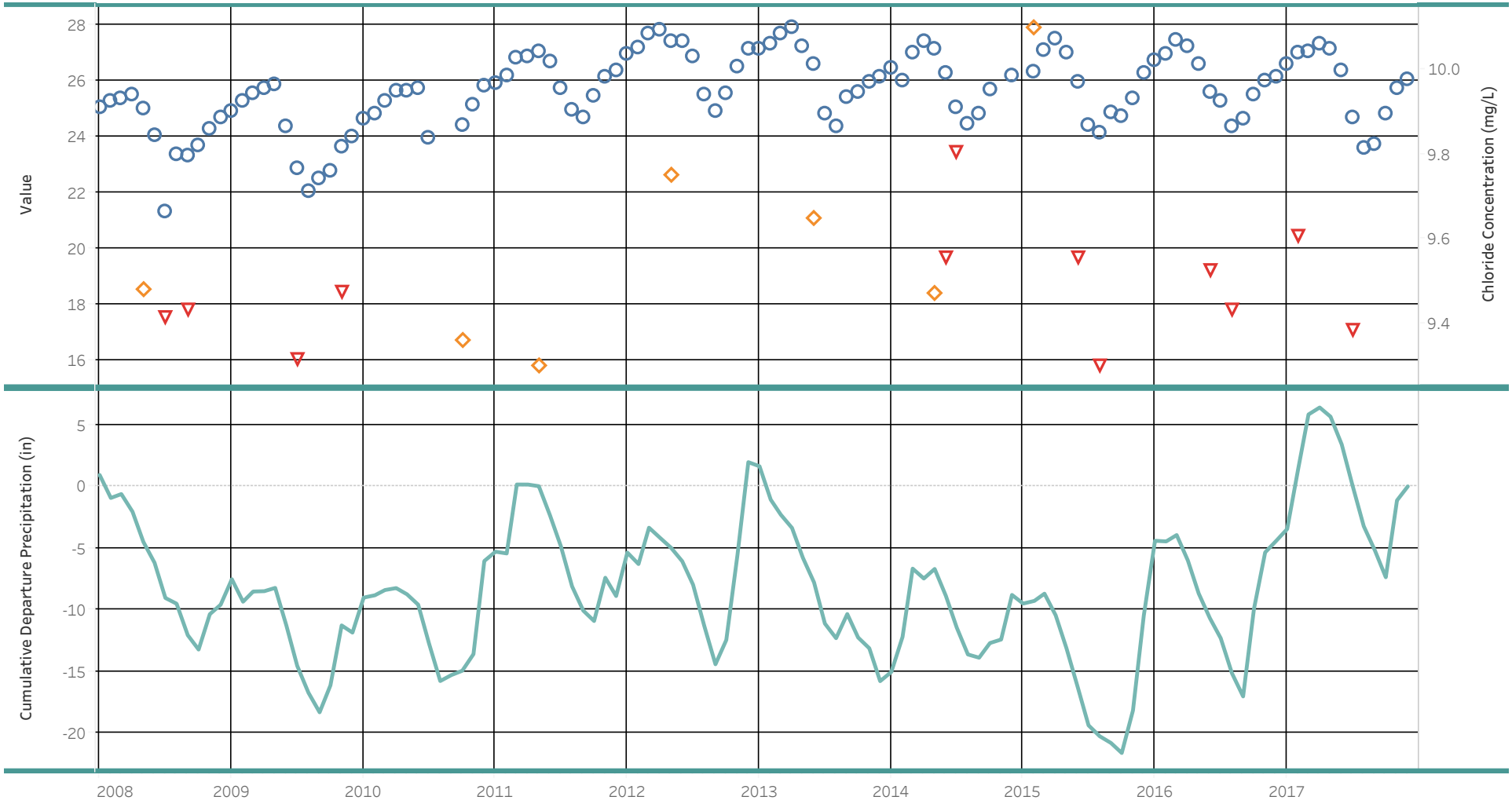


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Bill Point Water Well 3 spans 10 years, which included a maximum data collection gap (in months) of: 7.5. Estimated static water level trend is 0.16 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

- ○ Static Water Level
- ▽ Water level influenced by pumping

Well Summary - Bloedel Reserve Deep Well (FBA Aquifer)

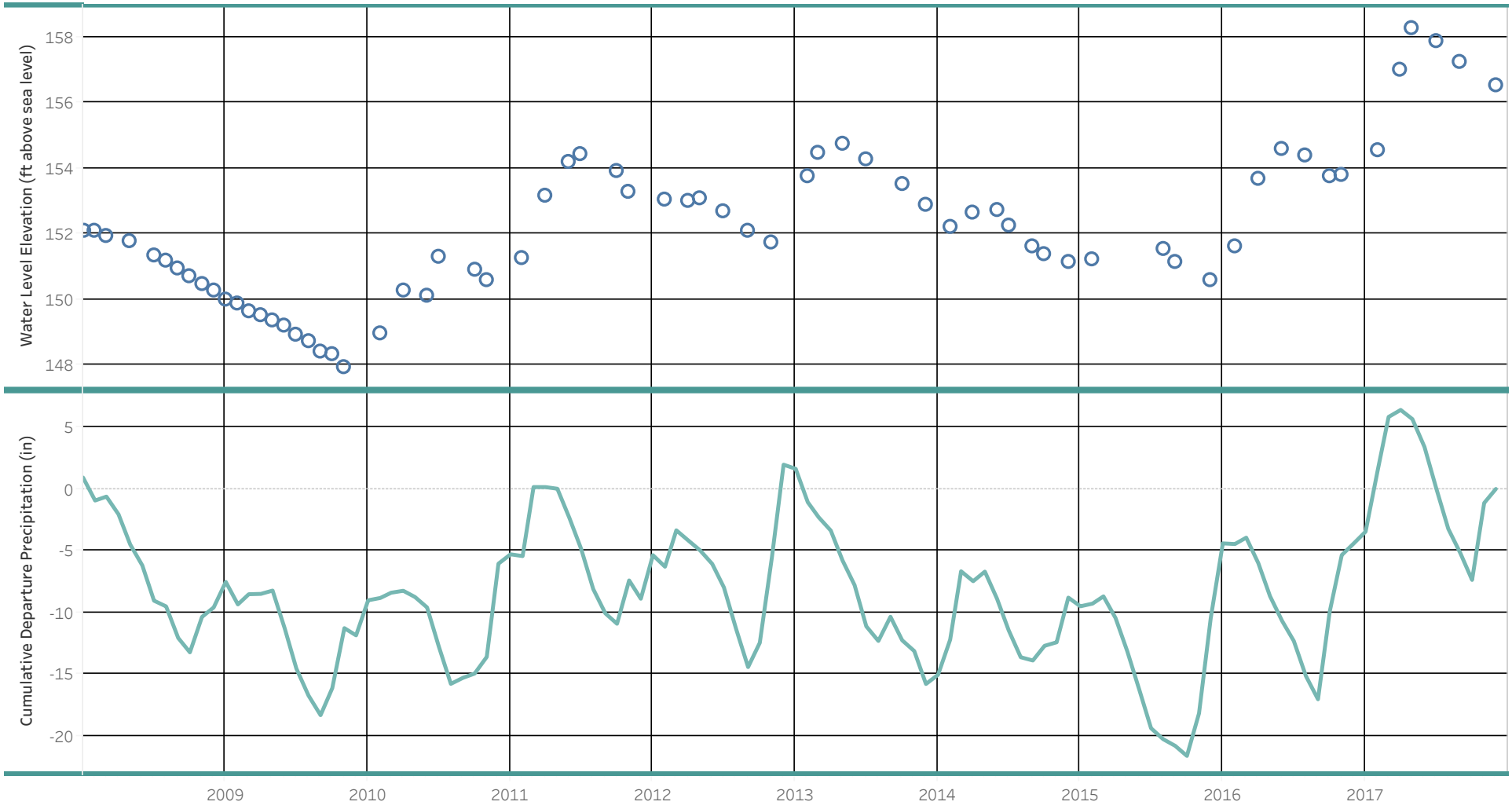


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Bloedel Reserve Deep Well spans 10 years, which included a maximum data collection gap (in months) of: 3.1. Estimated static water level trend is 0.17 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - Bloedel Reserve Farm Well (PA Aquifer)

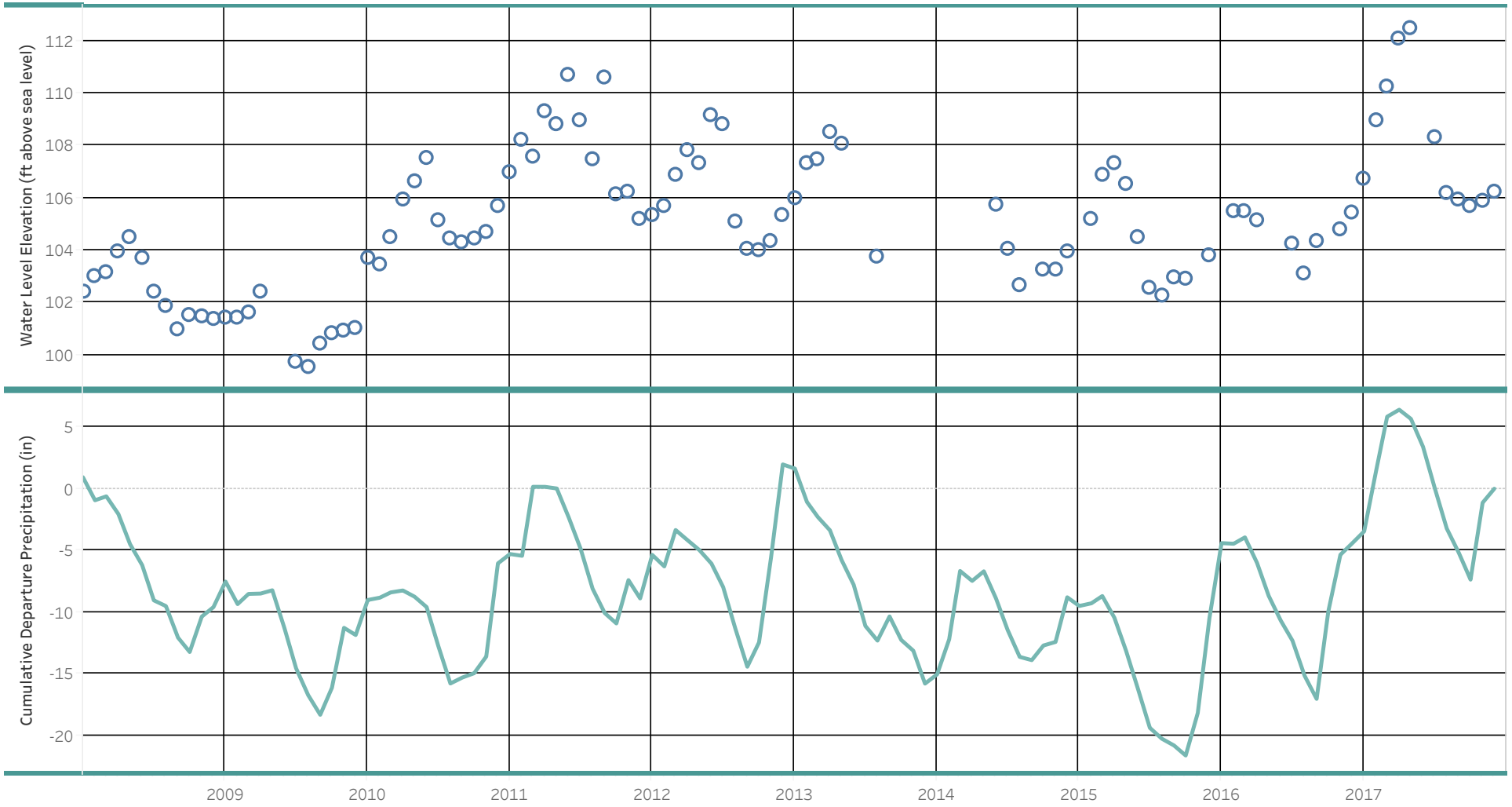


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Bloedel Reserve Farm Well spans 10 years, which included a maximum data collection gap (in months) of: 3.0. Estimated static water level trend is 0.53 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - Casey Street Water System (PA Aquifer)

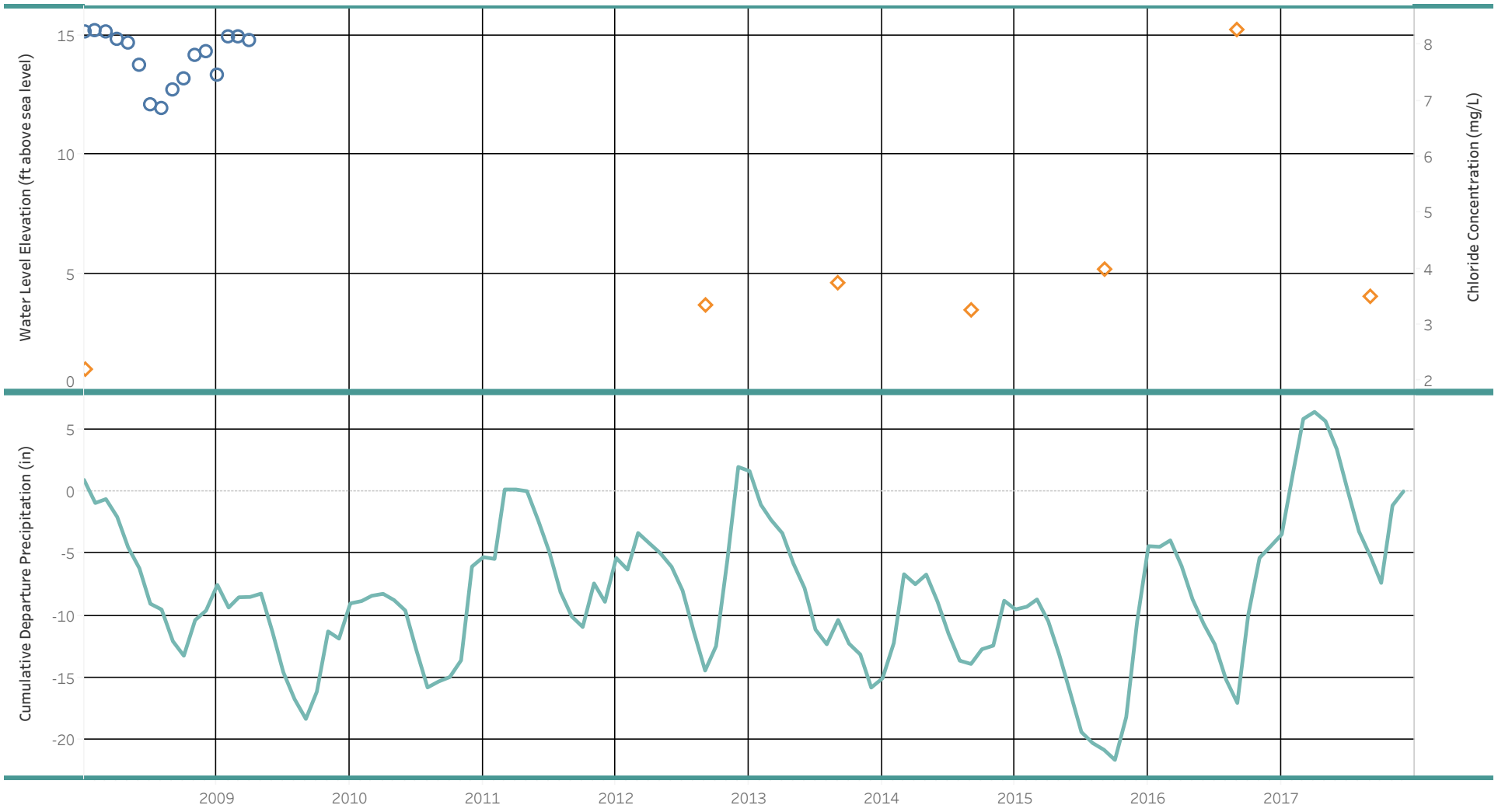


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Casey Street Water System spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.37 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - Cedar Lane Water System (SLA Aquifer)

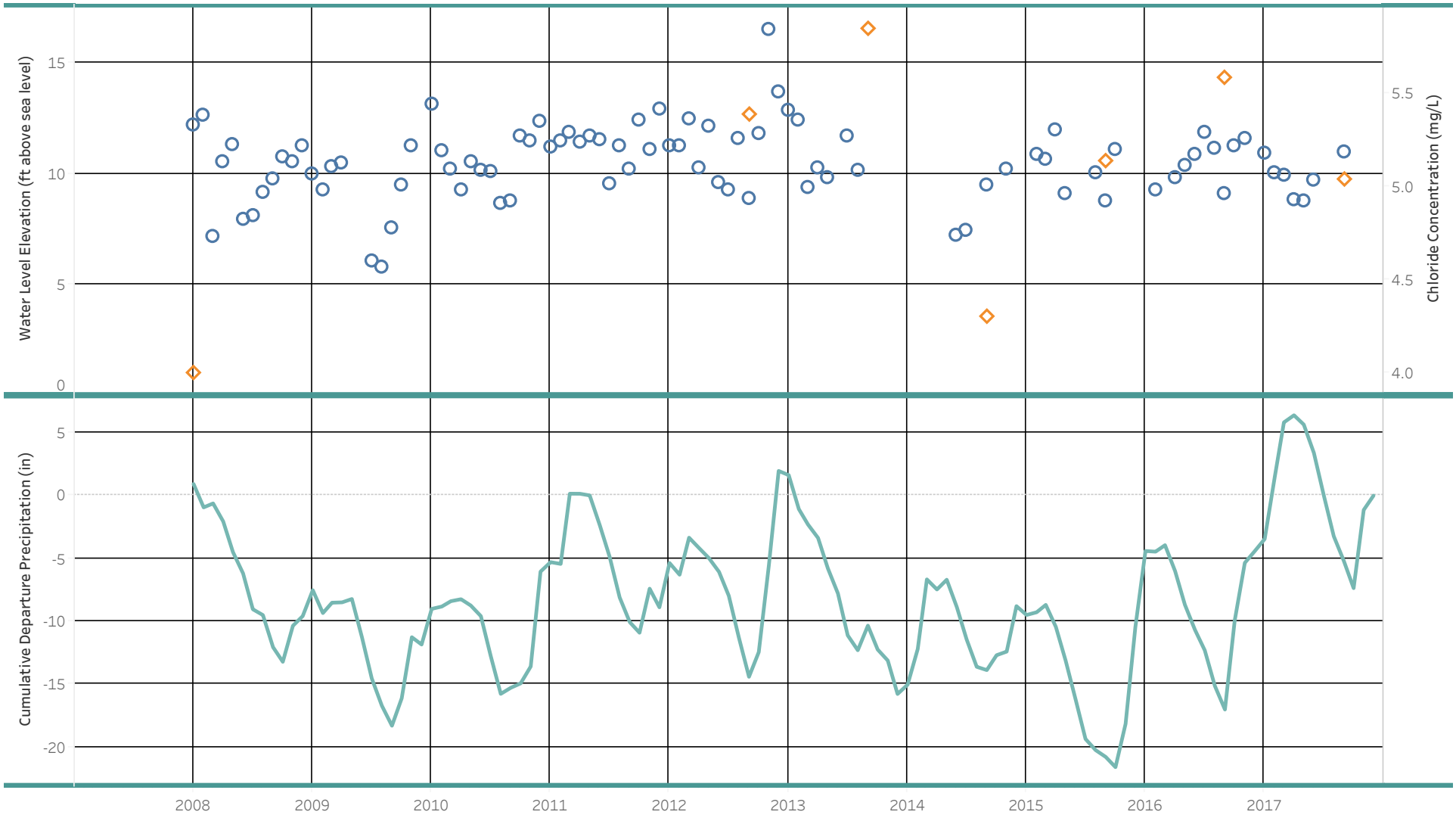


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Cedar Lane Water System spans 1 years, which included a maximum data collection gap (in months) of: 1.4. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 1 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - EPA/Wyckoff (GMA Aquifer)

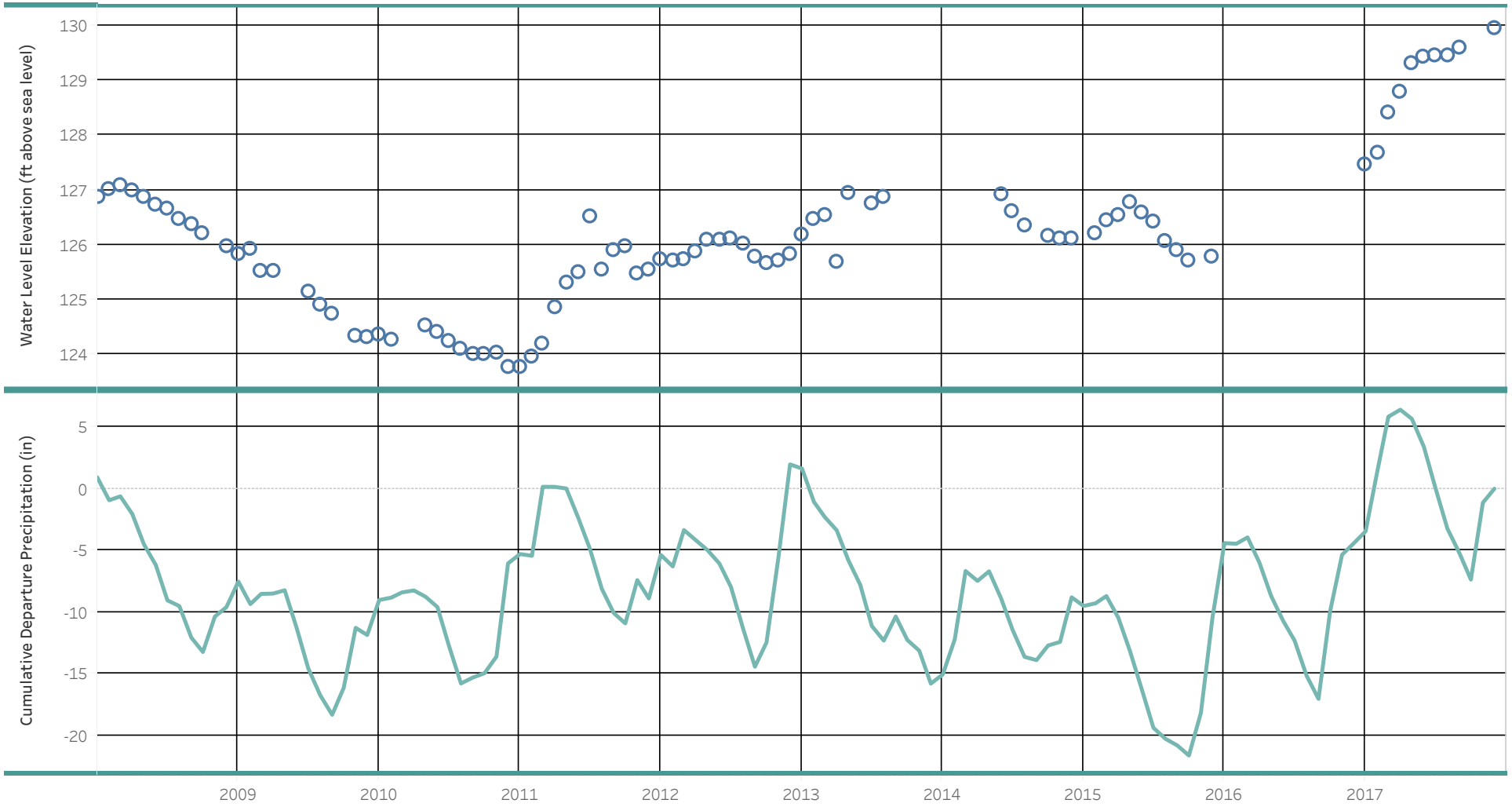


This chart displays a summary of water level data presented as a monthly average.
Static water level data for EPA/Wyckoff spans 10 years, which included a maximum data collection gap (in months) of: 10.4. Estimated static water level trend is 0.02 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - Eagledale Park (SPA Aquifer)

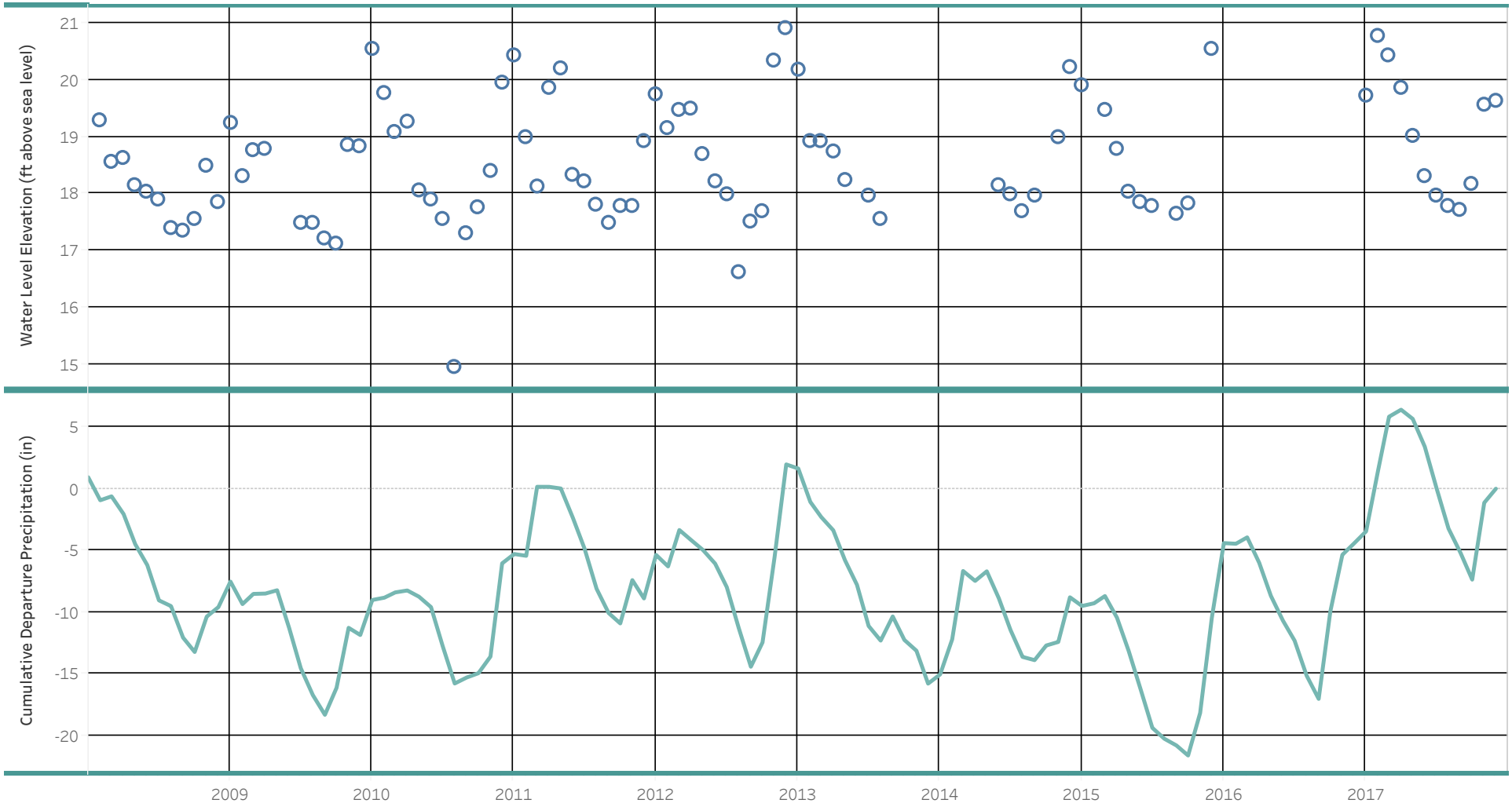


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Eagledale Park spans 10 years, which included a maximum data collection gap (in months) of: 13.7. Estimated static water level trend is 0.29 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - Fay Bainbridge Park (SLA Aquifer)

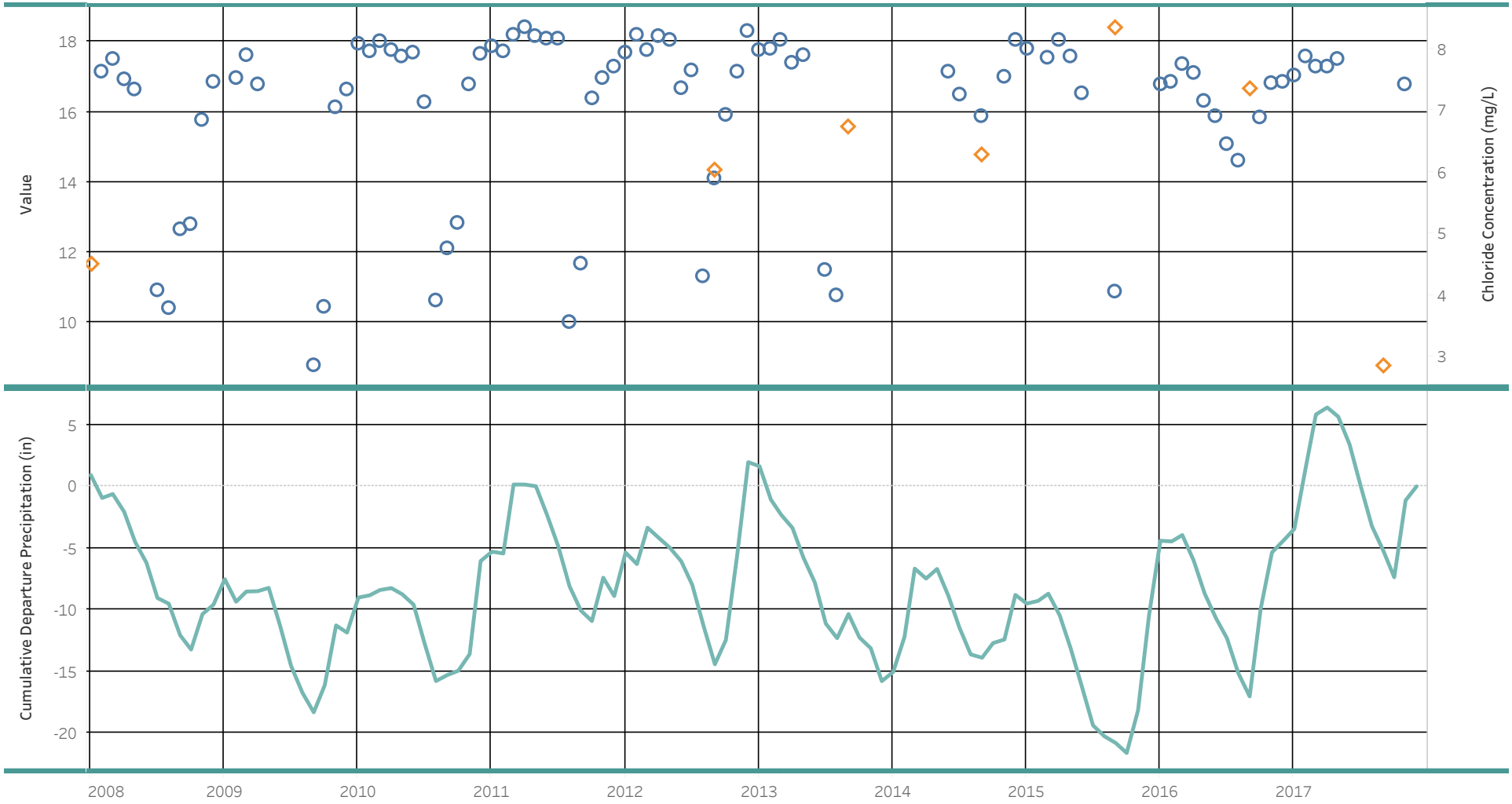


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Fay Bainbridge Park spans 10 years, which included a maximum data collection gap (in months) of: 13.3. Estimated static water level trend is 0.08 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - Ferncliff Water Assoc. (SPA Aquifer)

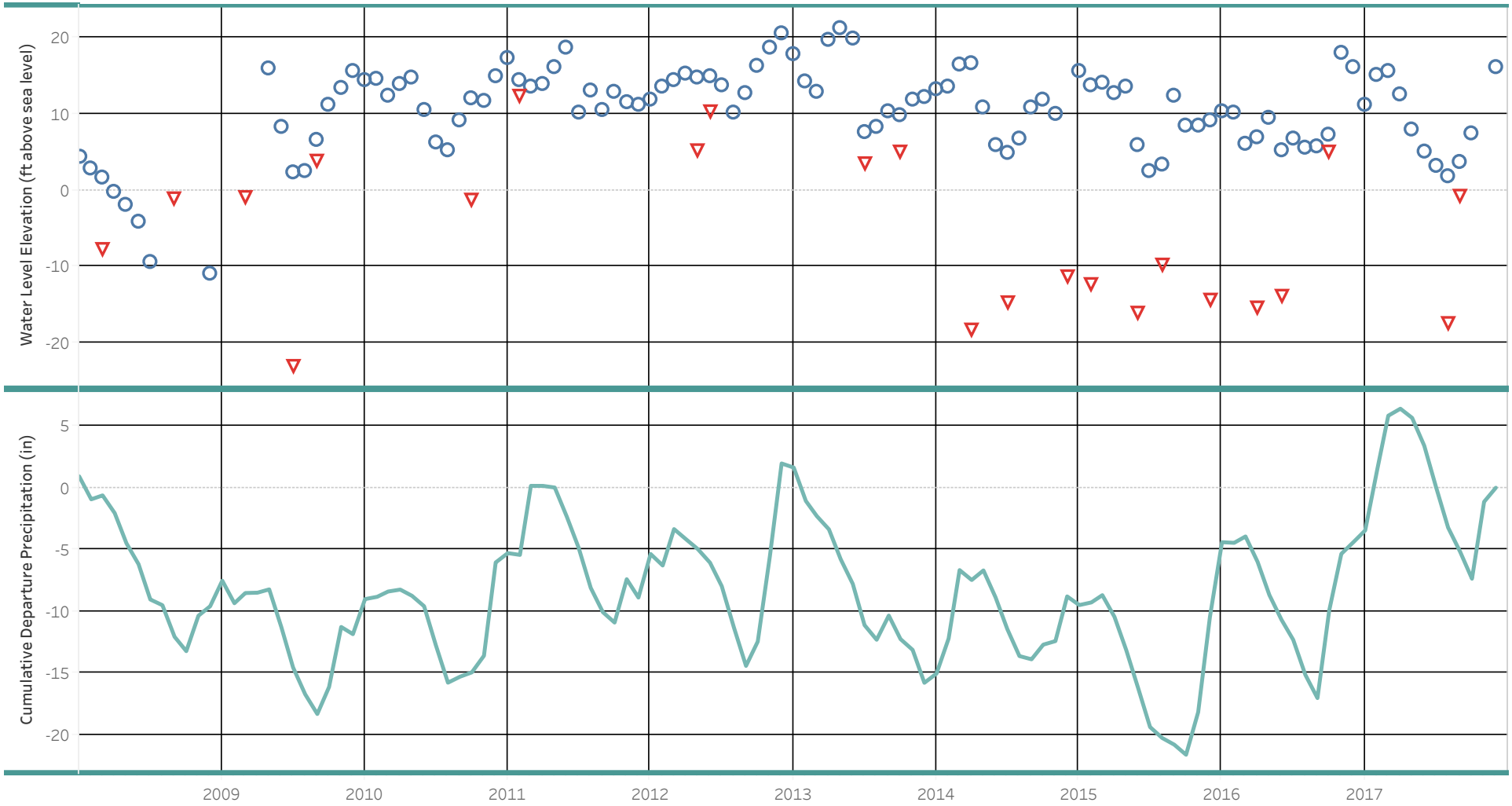


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Ferncliff Water Assoc. spans 10 years, which included a maximum data collection gap (in months) of: 10.6. Estimated static water level trend is 0.16 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - Fletcher Bay Observation Well (FBA Aquifer)

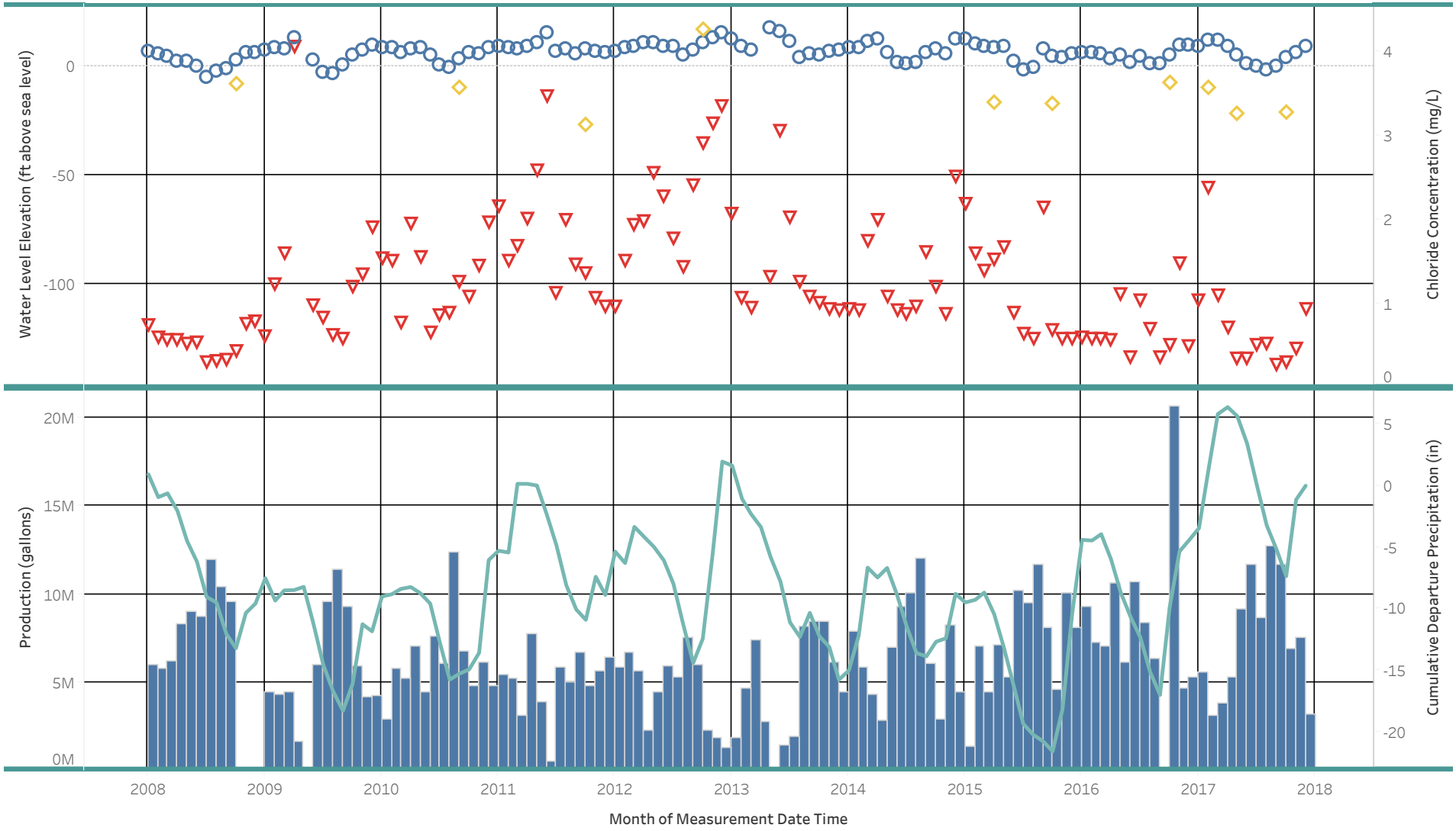


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Fletcher Bay Observation Well spans 10 years, which included a maximum data collection gap (in months) of: 4.7. Estimated static water level trend is 0.27 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

- ○ Static Water Level
- ▽ Water level influenced by pumping

Well Summary - Fletcher Bay PW (FBA Aquifer)

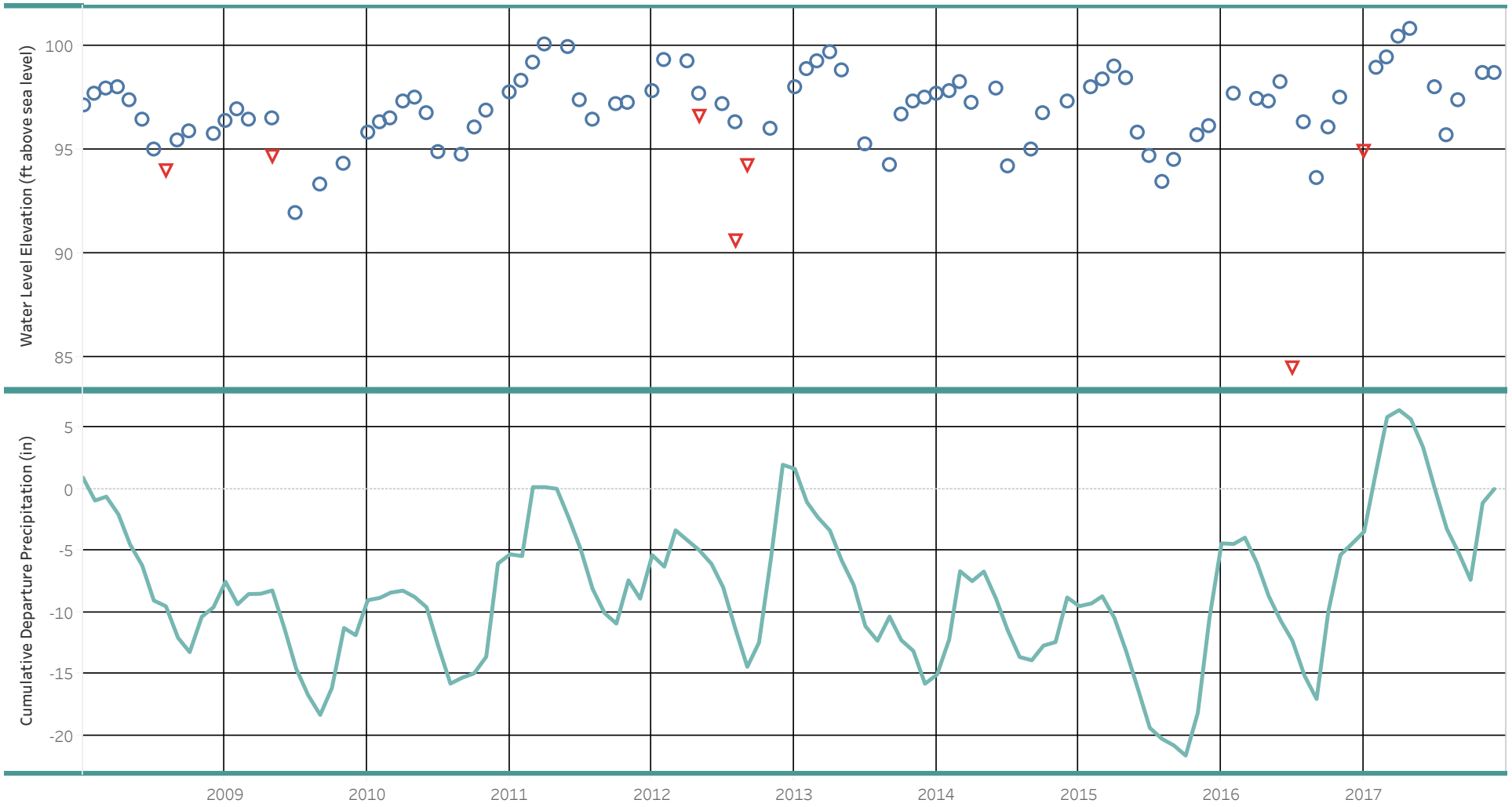


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Fletcher Bay PW spans 10 years, which included a maximum data collection gap (in months) of: 2.6. Estimated static water level trend is 0.11 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - Former KPUD Island Center TW (SLA Aquifer)

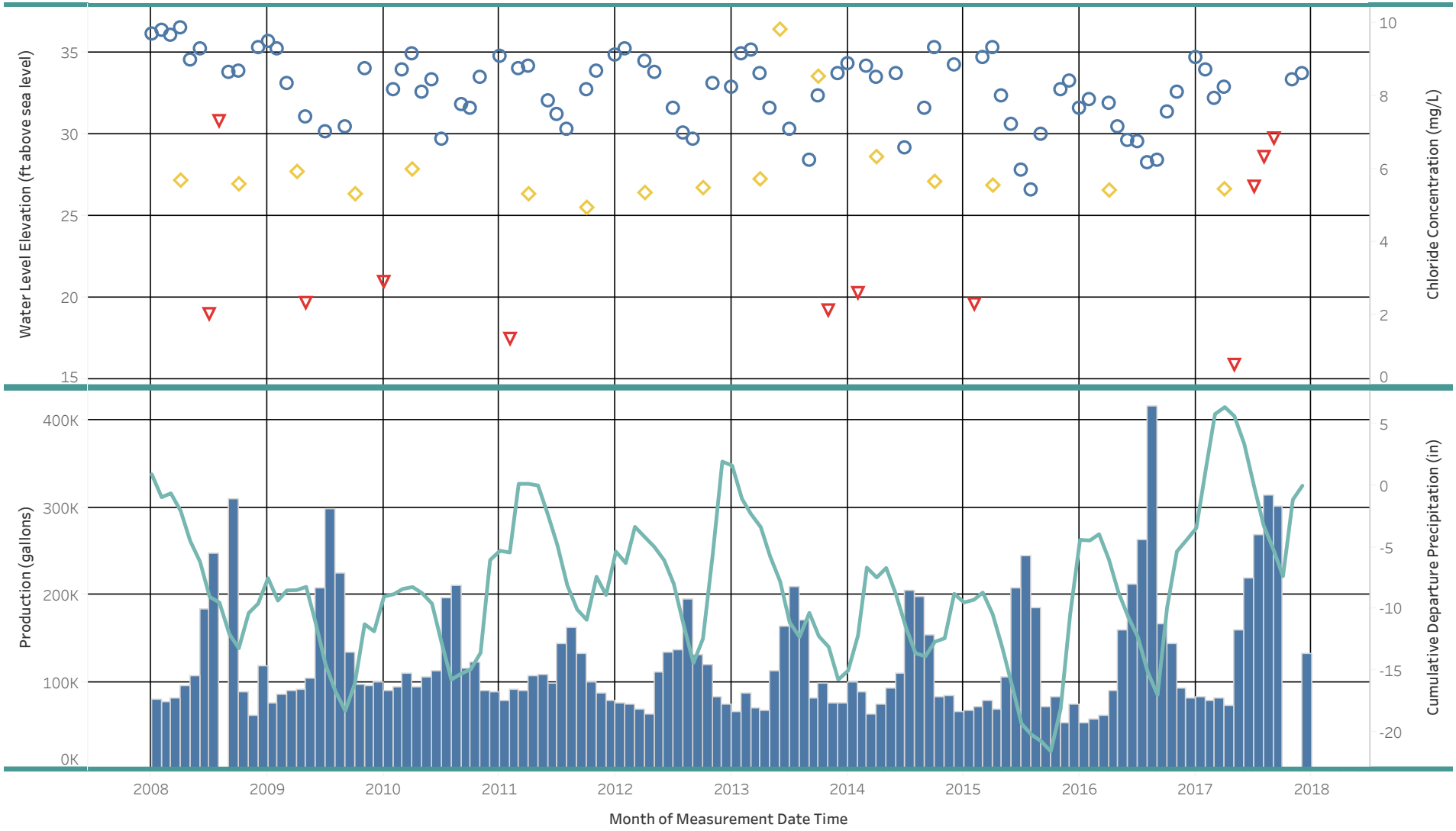


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Former KPUD Island Center TW spans 10 years, which included a maximum data collection gap (in months) of: 2.9. Estimated static water level trend is 0.12 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

- ○ Static Water Level
- ▽ Water level influenced by pumping

Well Summary - Harbor Crest (SLA Aquifer)

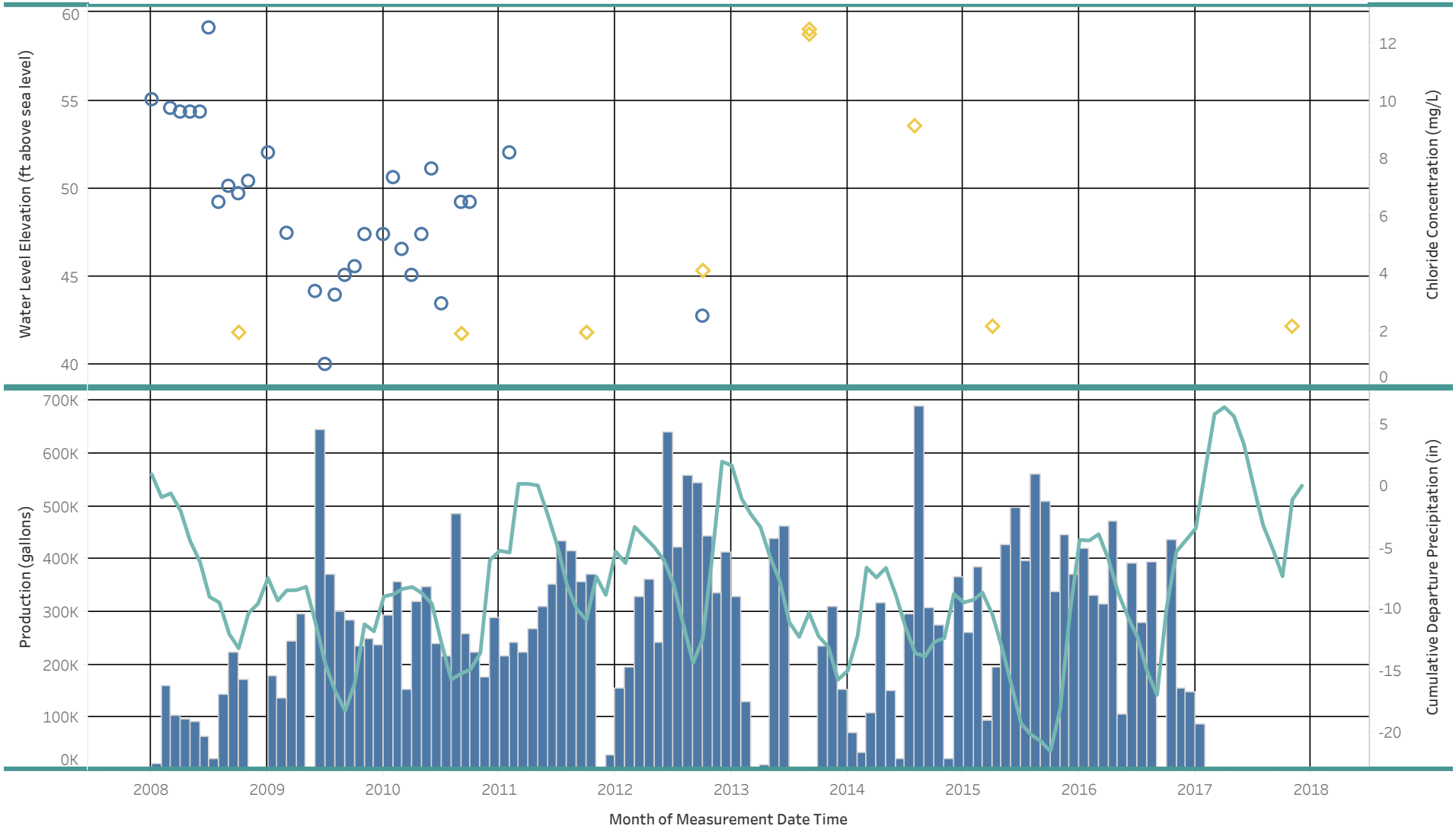


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Harbor Crest spans 10 years, which included a maximum data collection gap (in months) of: 7.1. Estimated static water level trend is -0.3 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - Head of the Bay Well #1 (SLA Aquifer)

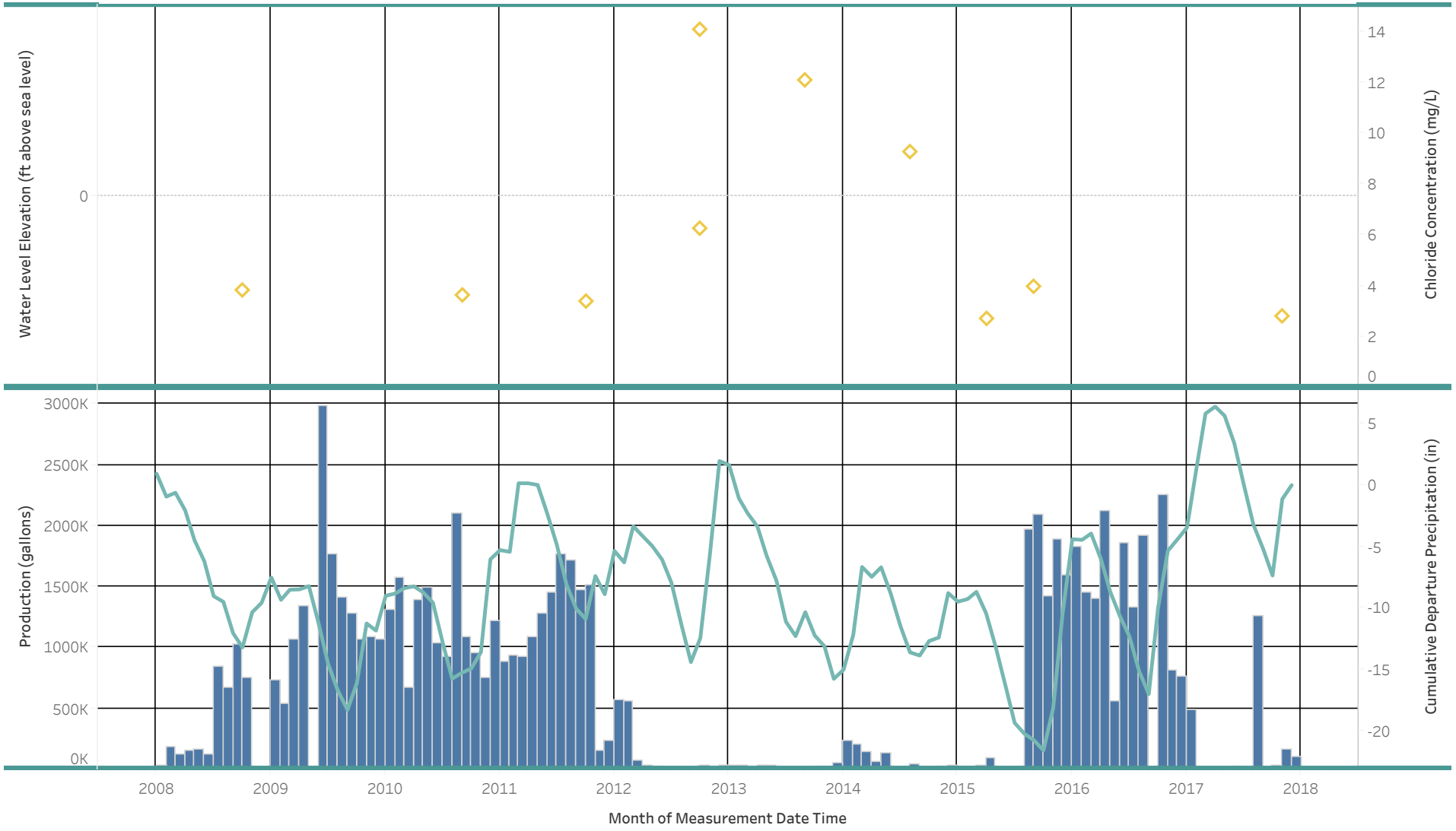


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Head of the Bay Well #1 spans 5 years, which included a maximum data collection gap (in months) of: 19.6. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 5 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - Head of the Bay Well #1A (SLA Aquifer)



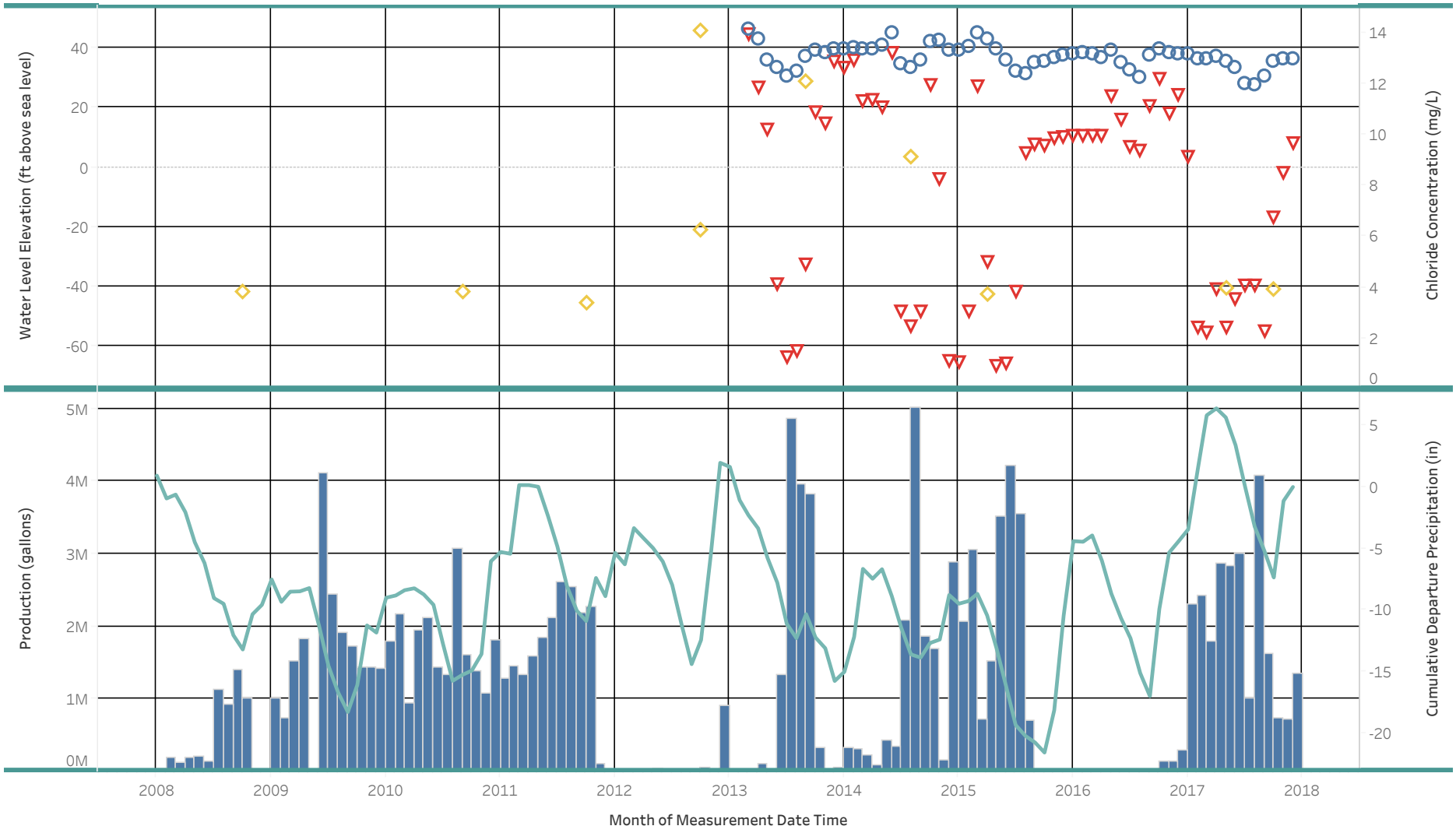
This chart displays a summary of water level data presented as a monthly average.
Static water level data for Head of the Bay Well #1A are not available, including a maximum data collection gap (in months) of: None. No early warning level assessment applied due to insufficient data (at least 8 years of data required). None available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

Chloride Results

◇ Chloride Concentration

Well Summary - Head of the Bay Well #2 (SLA Aquifer)

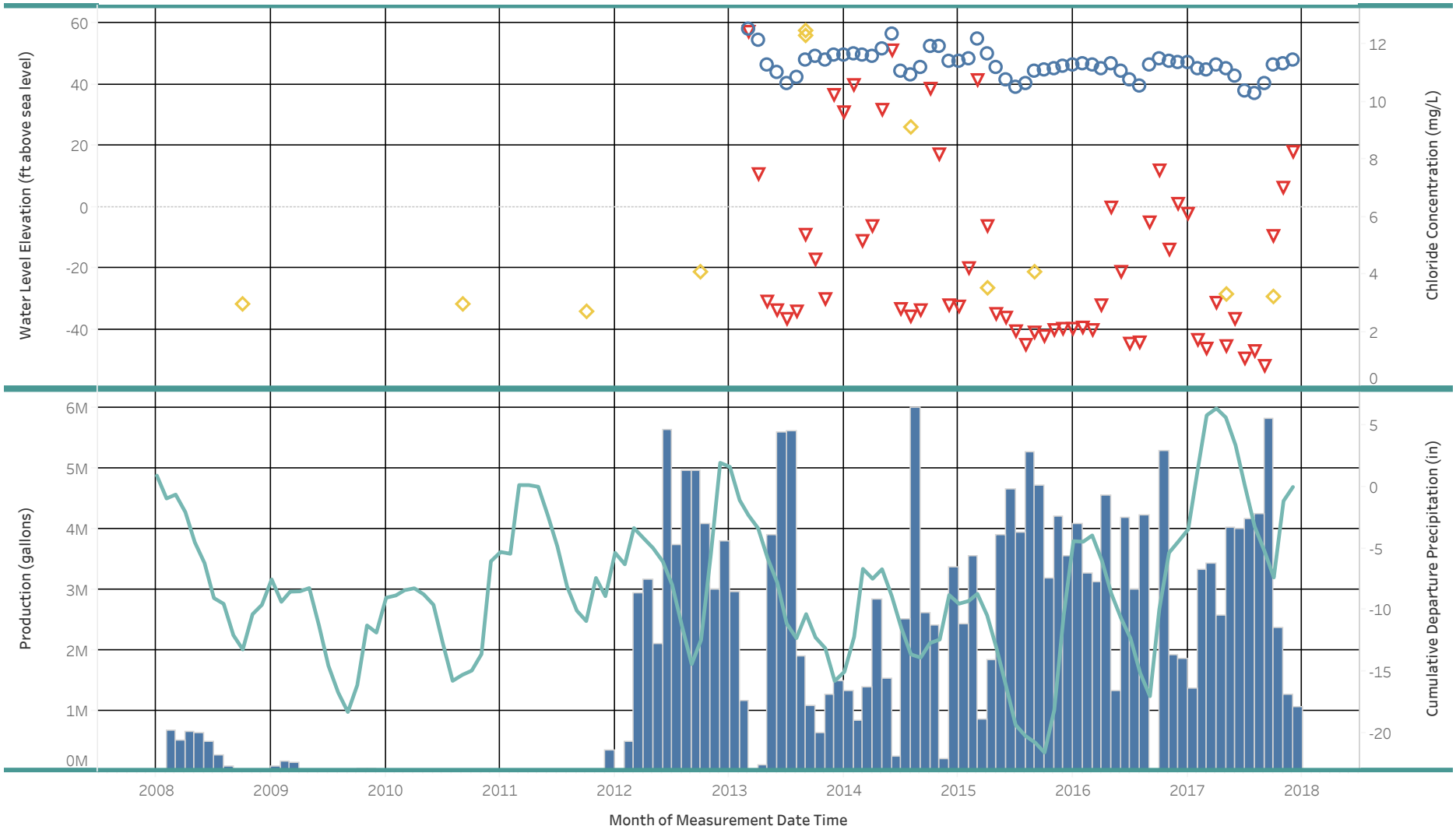


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Head of the Bay Well #2 spans 5 years, which included a maximum data collection gap (in months) of: 1.1. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 5 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- Static Water Level
- Water level influenced by pumping

Chloride Results
- Chloride Concentration

Well Summary - Head of the Bay Well #3 (SLA Aquifer)

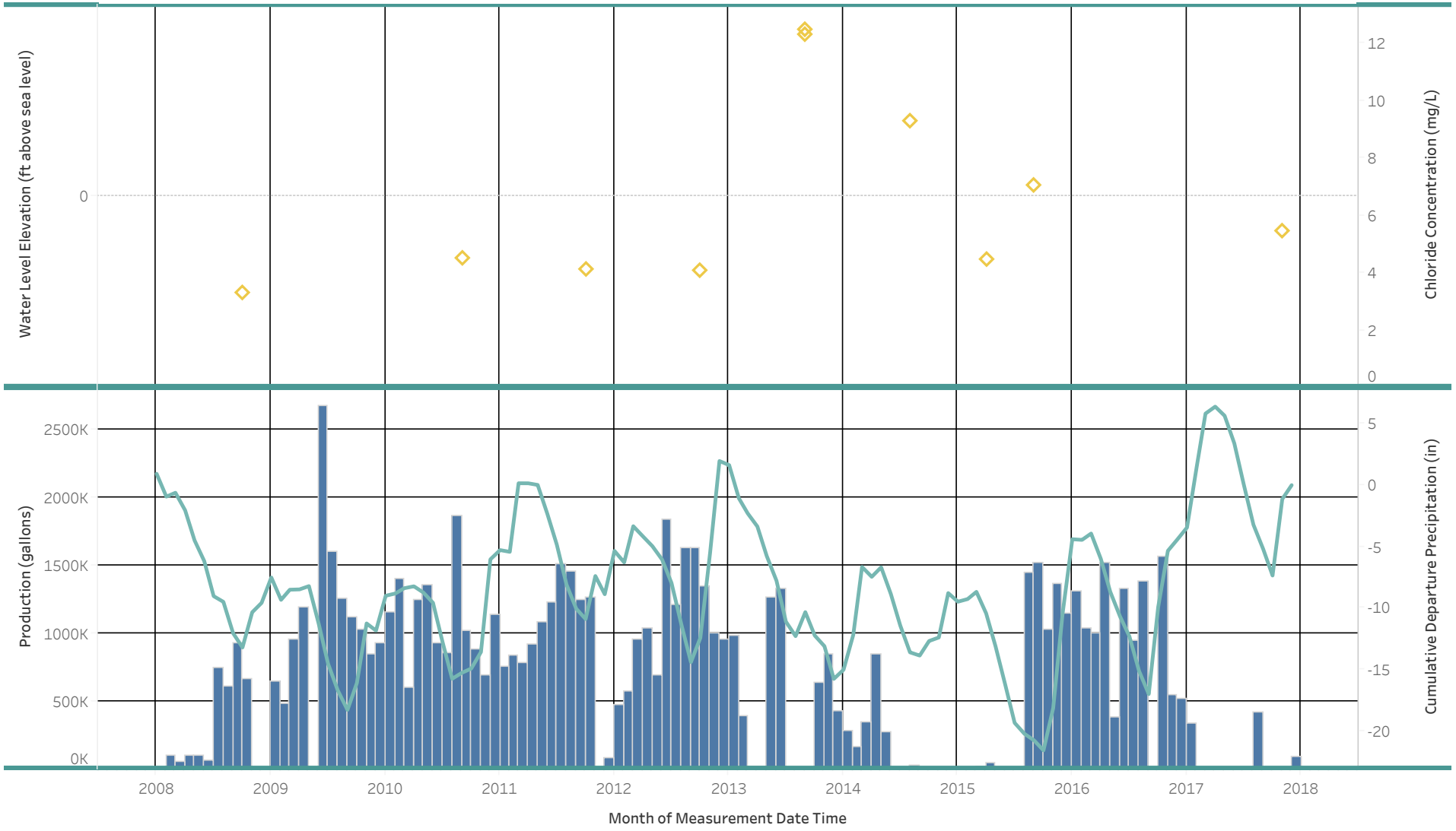


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Head of the Bay Well #3 spans 5 years, which included a maximum data collection gap (in months) of: 1.1. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 5 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- Static Water Level
- Water level influenced by pumping

Chloride Results
- Chloride Concentration

Well Summary - Head of the Bay Well #4 (SLA Aquifer)



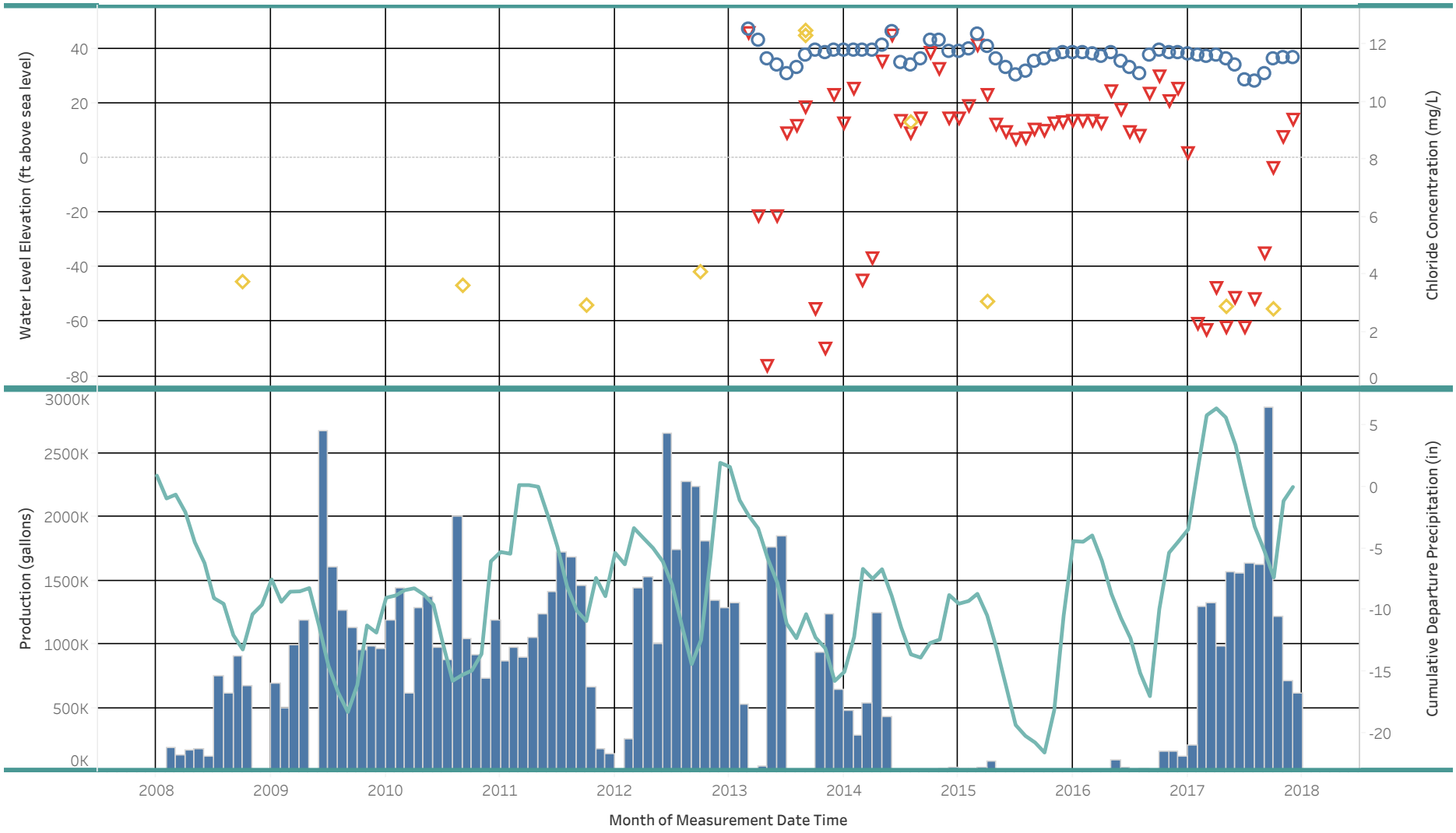
This chart displays a summary of water level data presented as a monthly average.
Static water level data for Head of the Bay Well #4 are not available, including a maximum data collection gap (in months) of: None. No early warning level assessment applied due to insufficient data (at least 8 years of data required). None available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

Chloride Results

◇ Chloride Concentration

Well Summary - Head of the Bay Well #5 (SLA Aquifer)

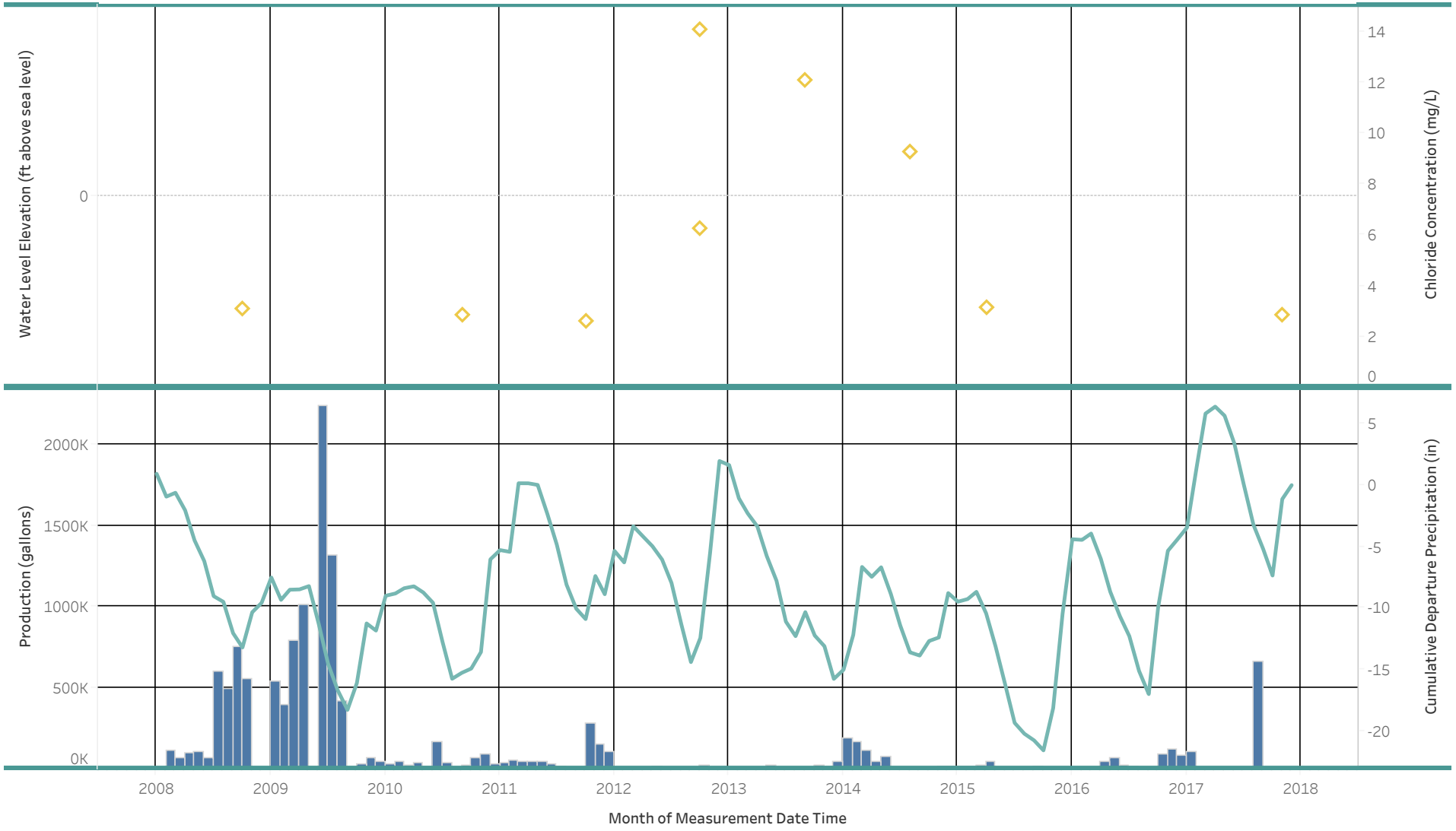


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Head of the Bay Well #5 spans 5 years, which included a maximum data collection gap (in months) of: 1.1. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 5 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- Static Water Level
- Water level influenced by pumping

Chloride Results
- Chloride Concentration

Well Summary - Head of the Bay Well #6 (SLA Aquifer)



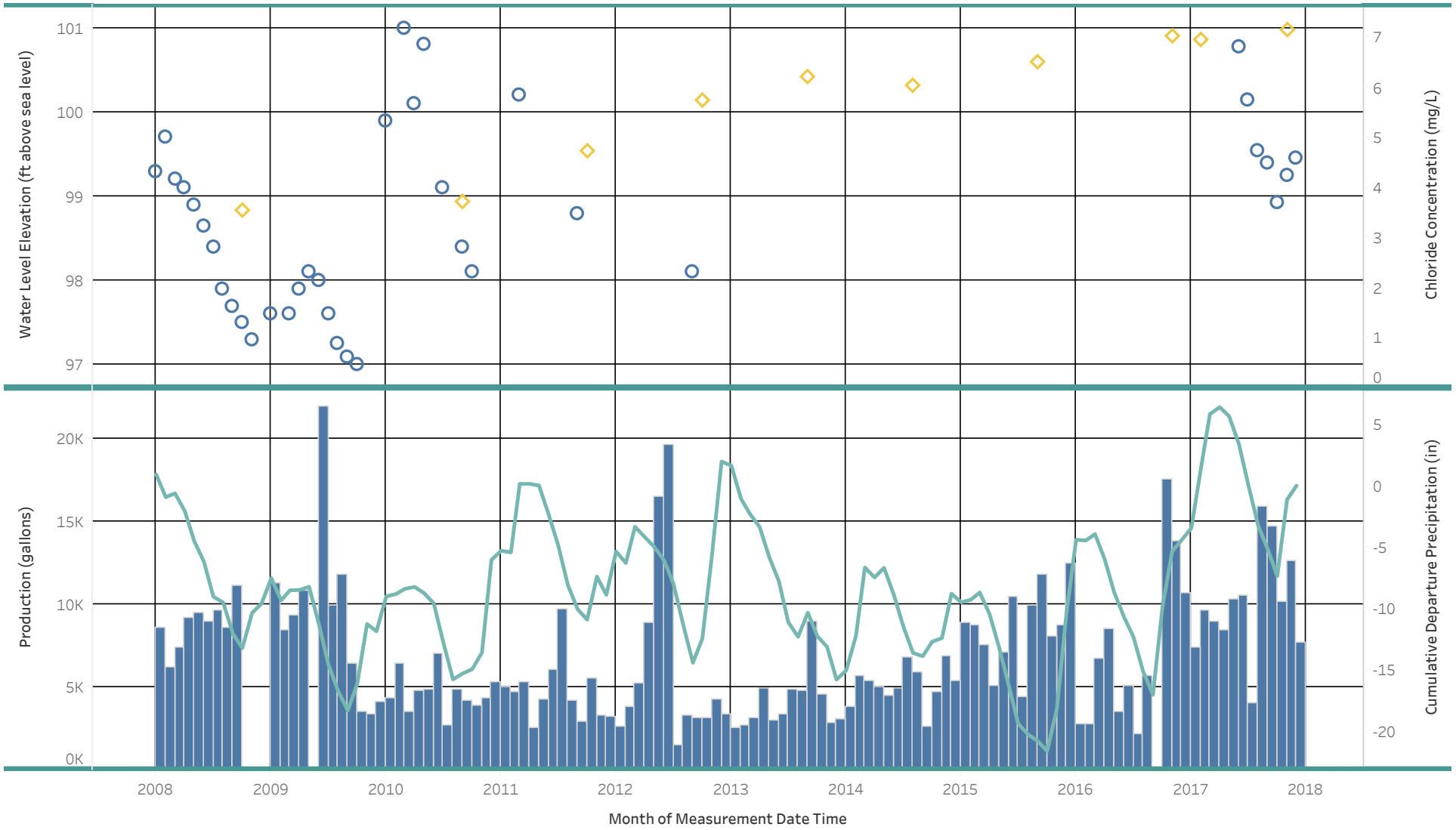
This chart displays a summary of water level data presented as a monthly average.
Static water level data for Head of the Bay Well #6 are not available, including a maximum data collection gap (in months) of: None. No early warning level assessment applied due to insufficient data (at least 8 years of data required). None available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

Chloride Results

◇ Chloride Concentration

Well Summary - Hidden Cove Utilities Shop (SPA Aquifer)

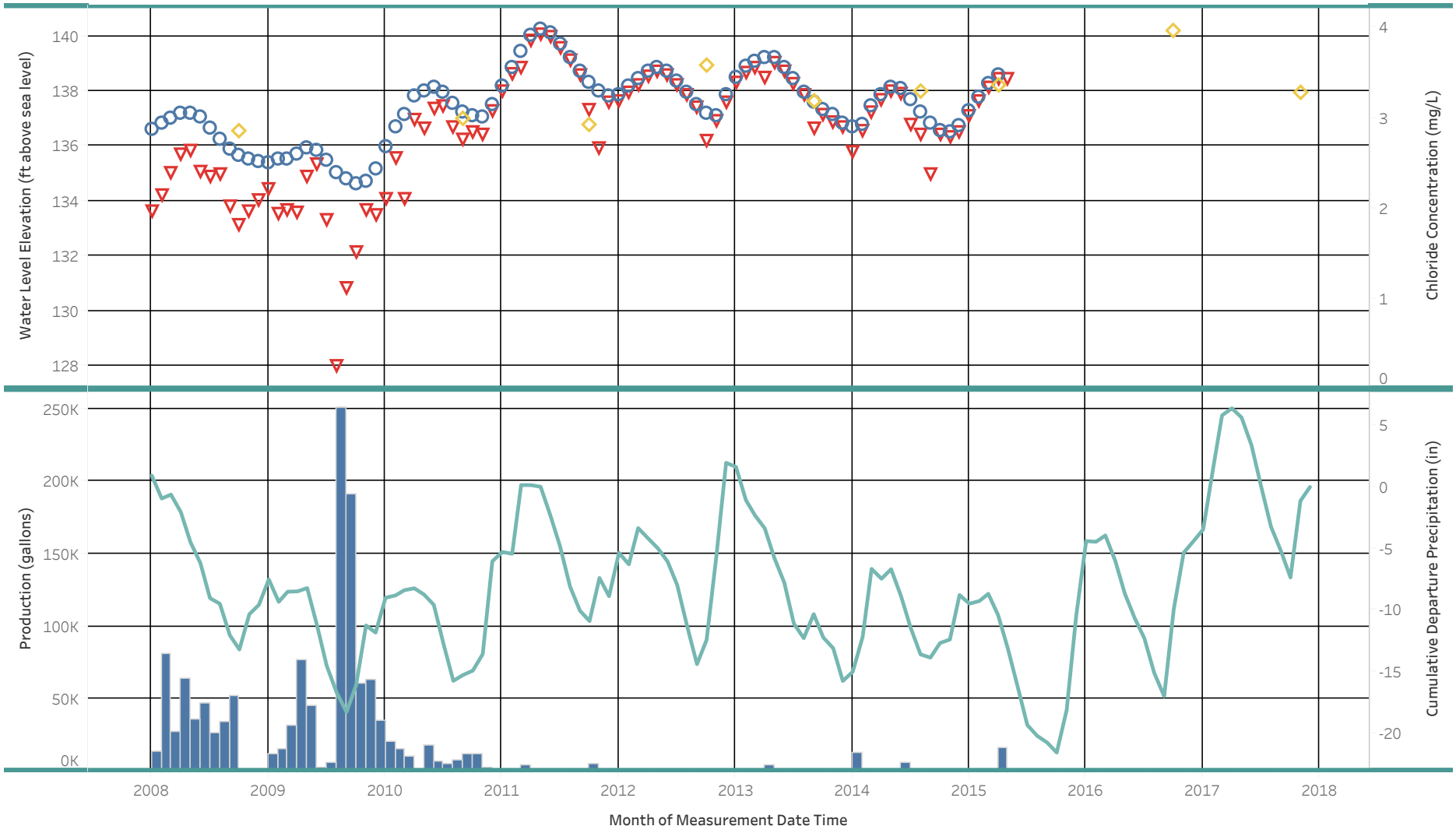


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Hidden Cove Utilities Shop spans 10 years, which included a maximum data collection gap (in months) of: 57.8. Estimated static water level trend is 0.13 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - High School Well #2/Commodore (SPA Aquifer)

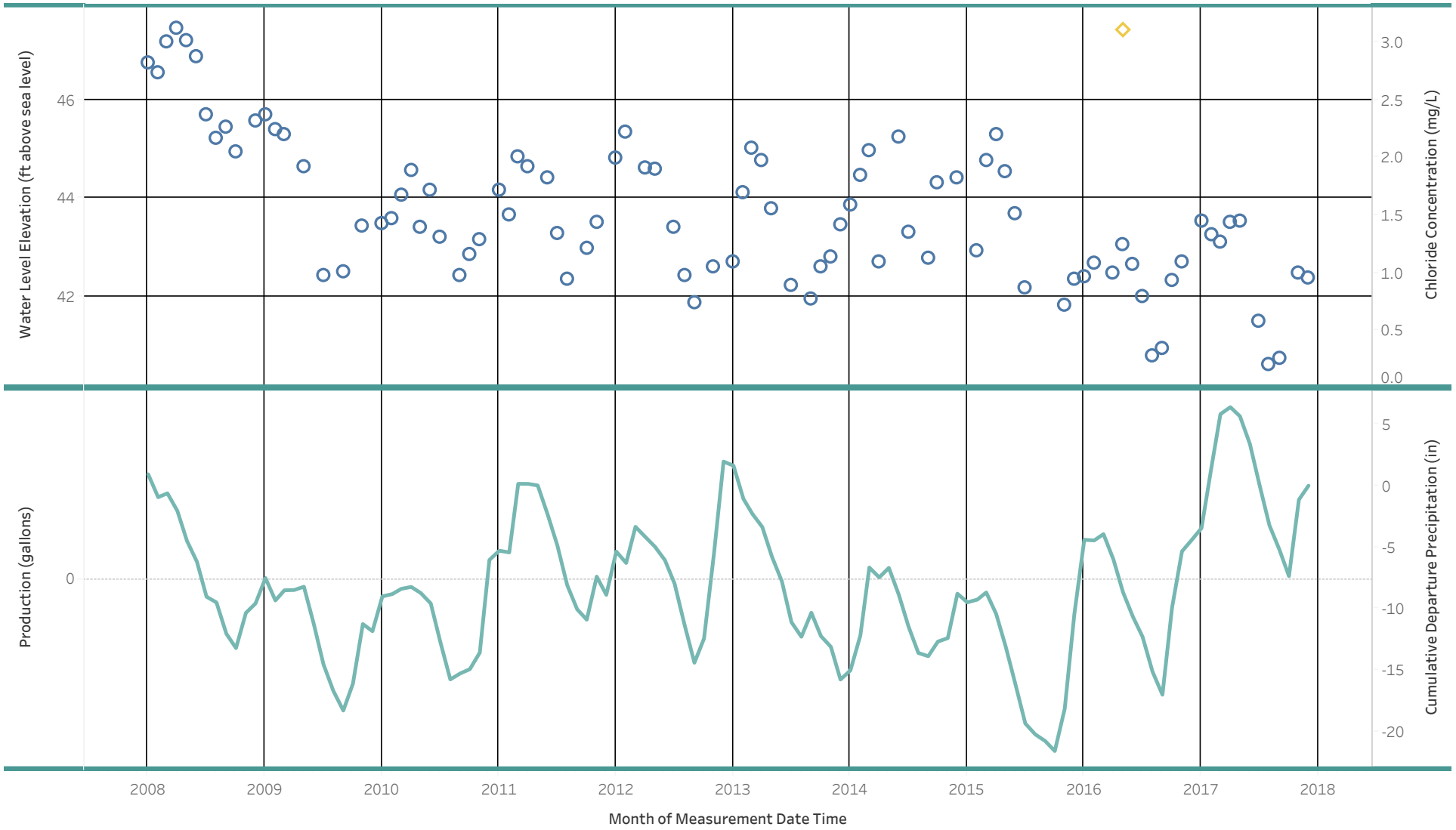


This chart displays a summary of water level data presented as a monthly average.
Static water level data for High School Well #2/Commodore spans 7 years, which included a maximum data collection gap (in months) of: 1.5. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 7 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- Static Water Level
- Water level influenced by pumping

Chloride Results
- Chloride Concentration

Well Summary - Island Utilities MW (SLA Aquifer)

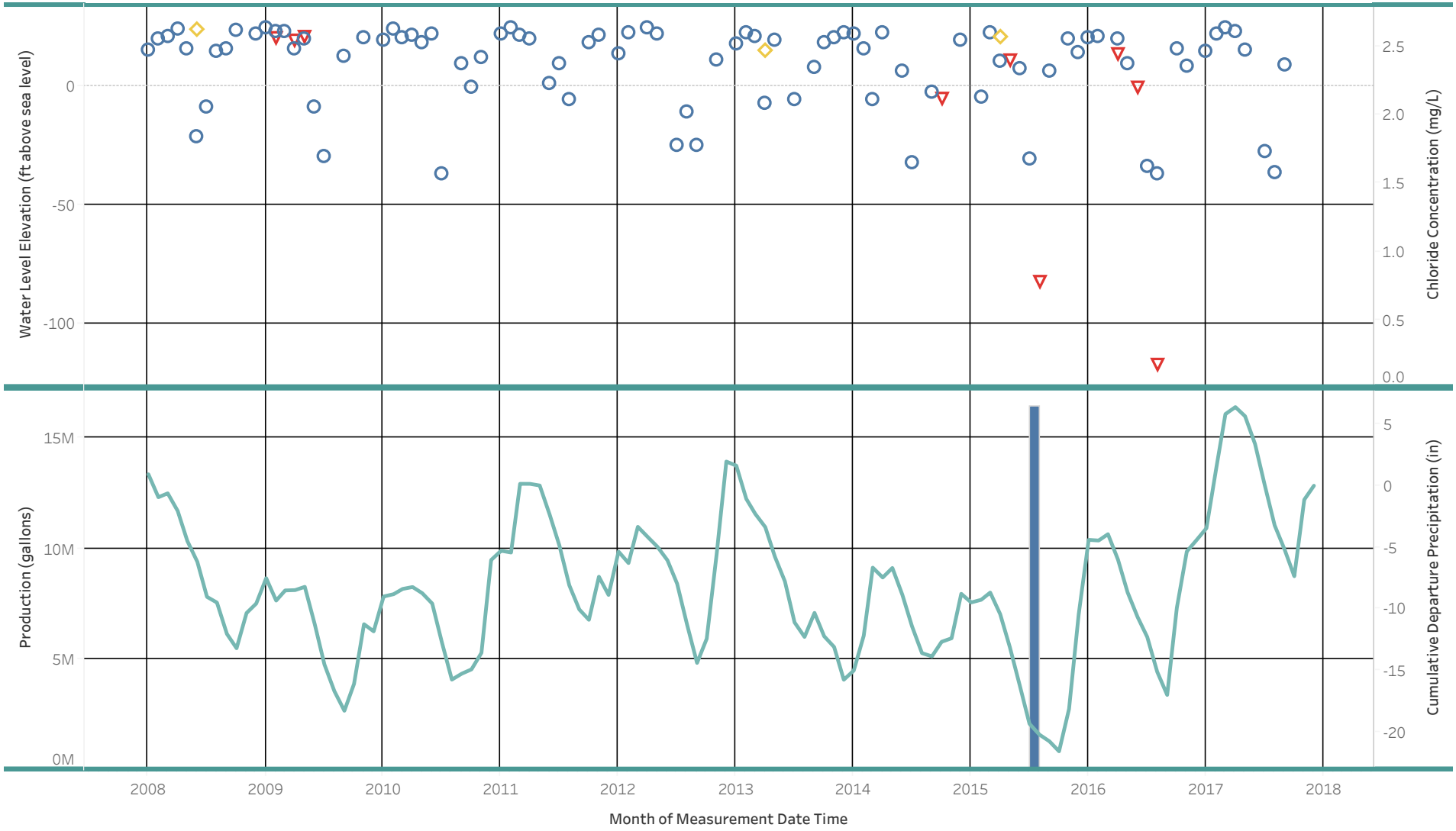


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Island Utilities MW spans 10 years, which included a maximum data collection gap (in months) of: 4.2. Estimated static water level trend is -0.32 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - Island Utilities Well 1 (FBA Aquifer)

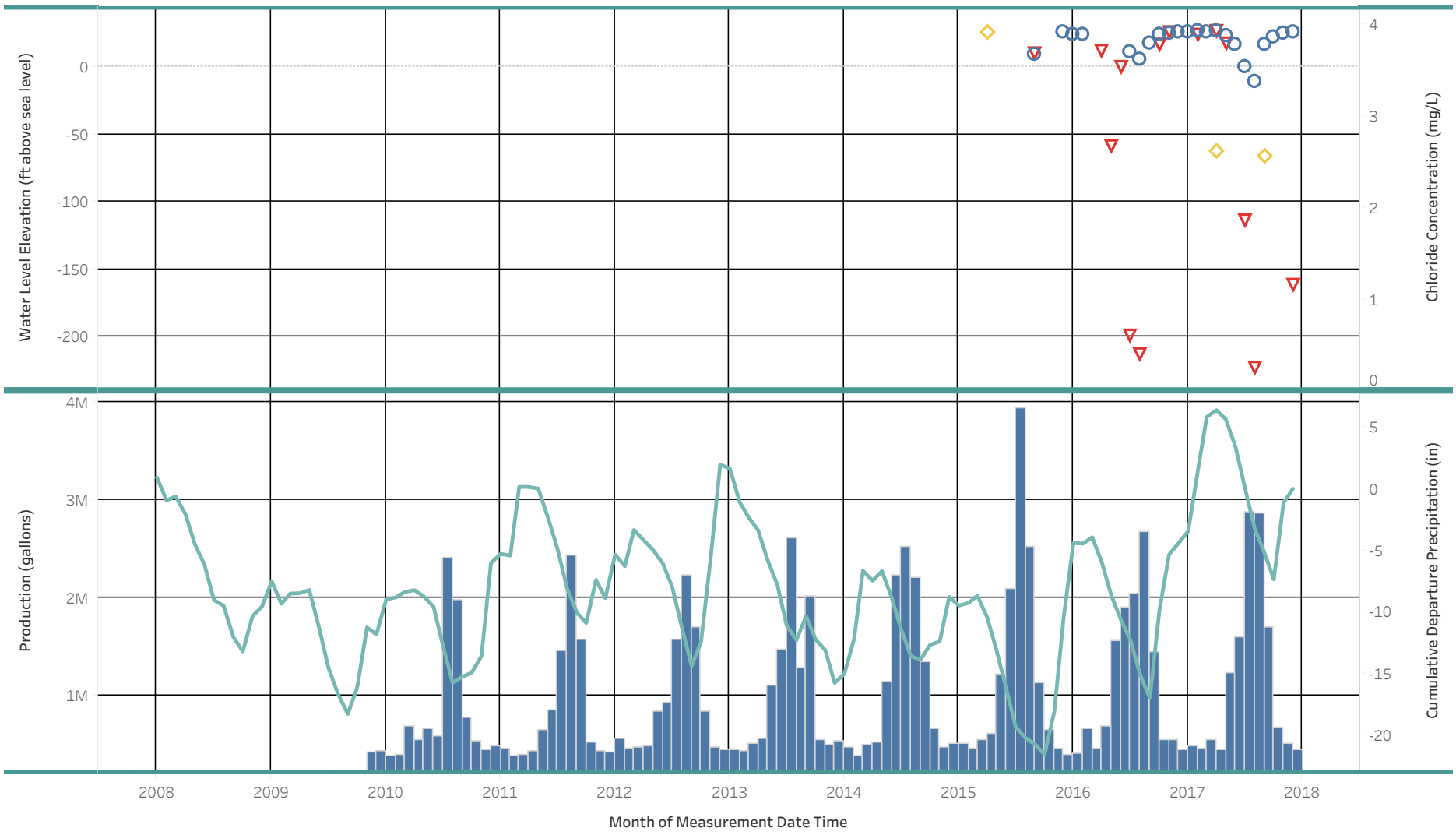


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Island Utilities Well 1 spans 10 years, which included a maximum data collection gap (in months) of: 2.6. Estimated static water level trend is -1.16 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - Island Utilities Well 2 (FBA Aquifer)

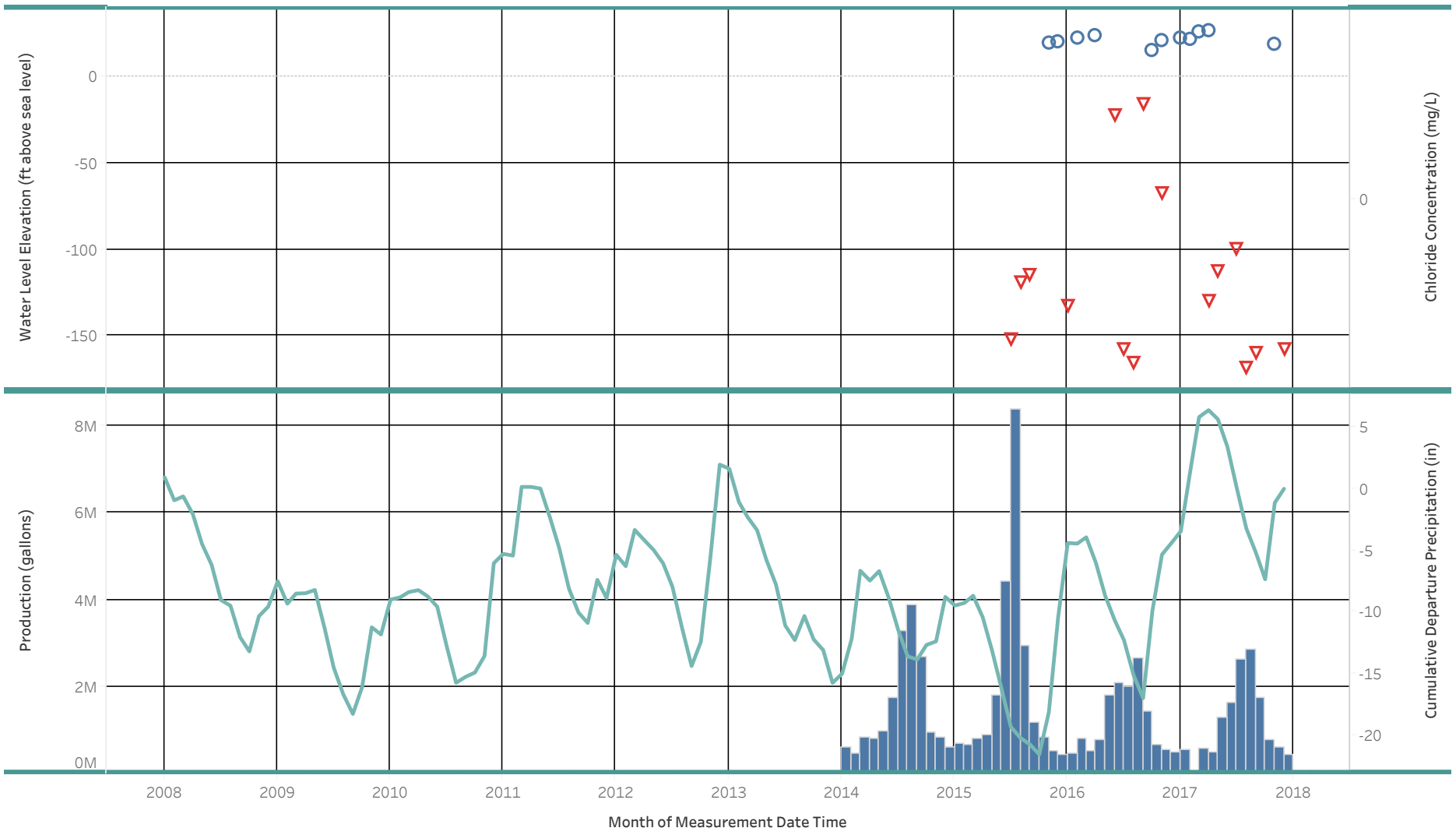


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Island Utilities Well 2 spans 2 years, which included a maximum data collection gap (in months) of: 2.7. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 2 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - Island Utilities Well 3 (FBA Aquifer)

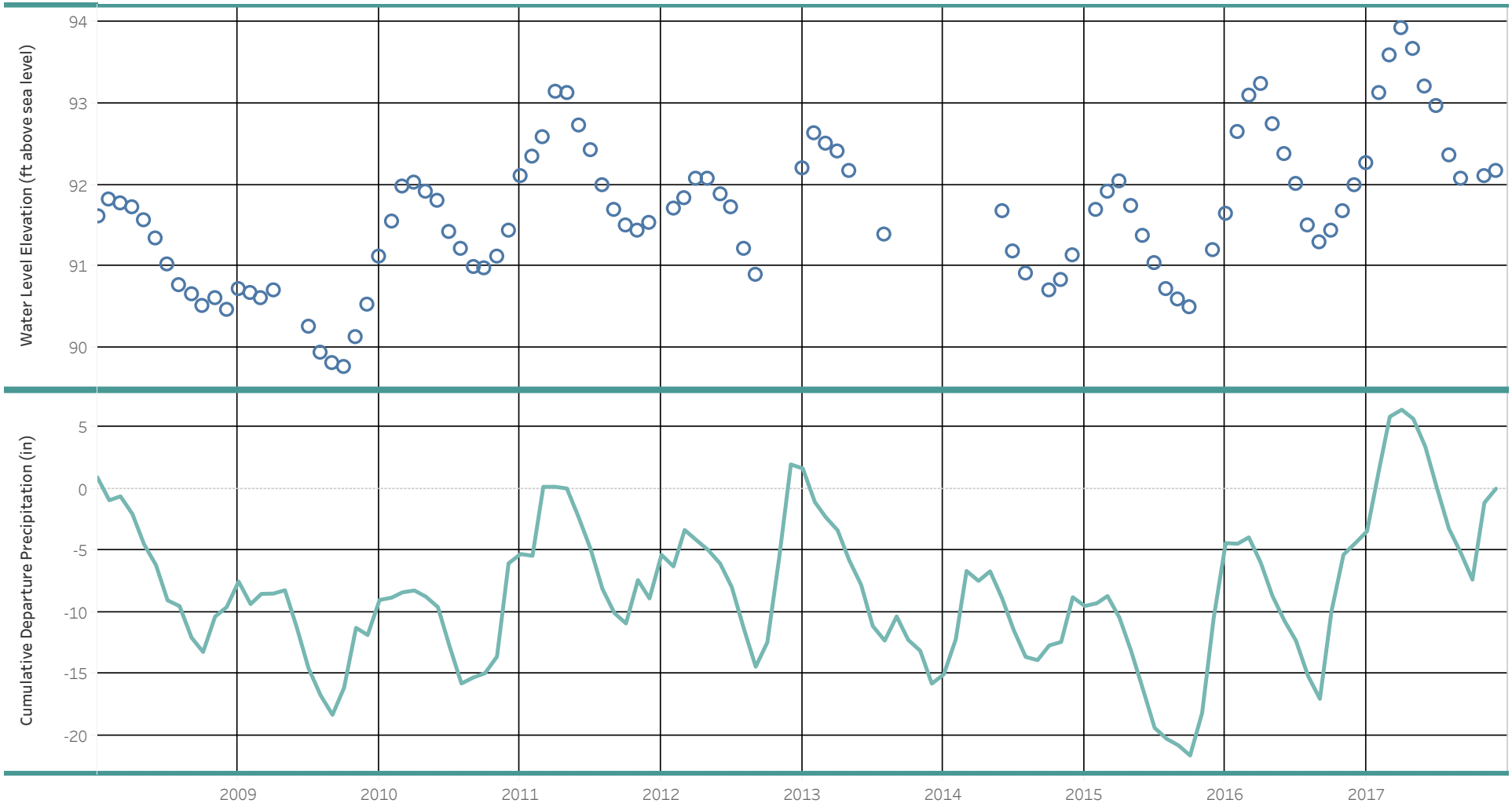


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Island Utilities Well 3 spans 2 years, which included a maximum data collection gap (in months) of: 7.4. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 2 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - Johnson Farm (PA Aquifer)

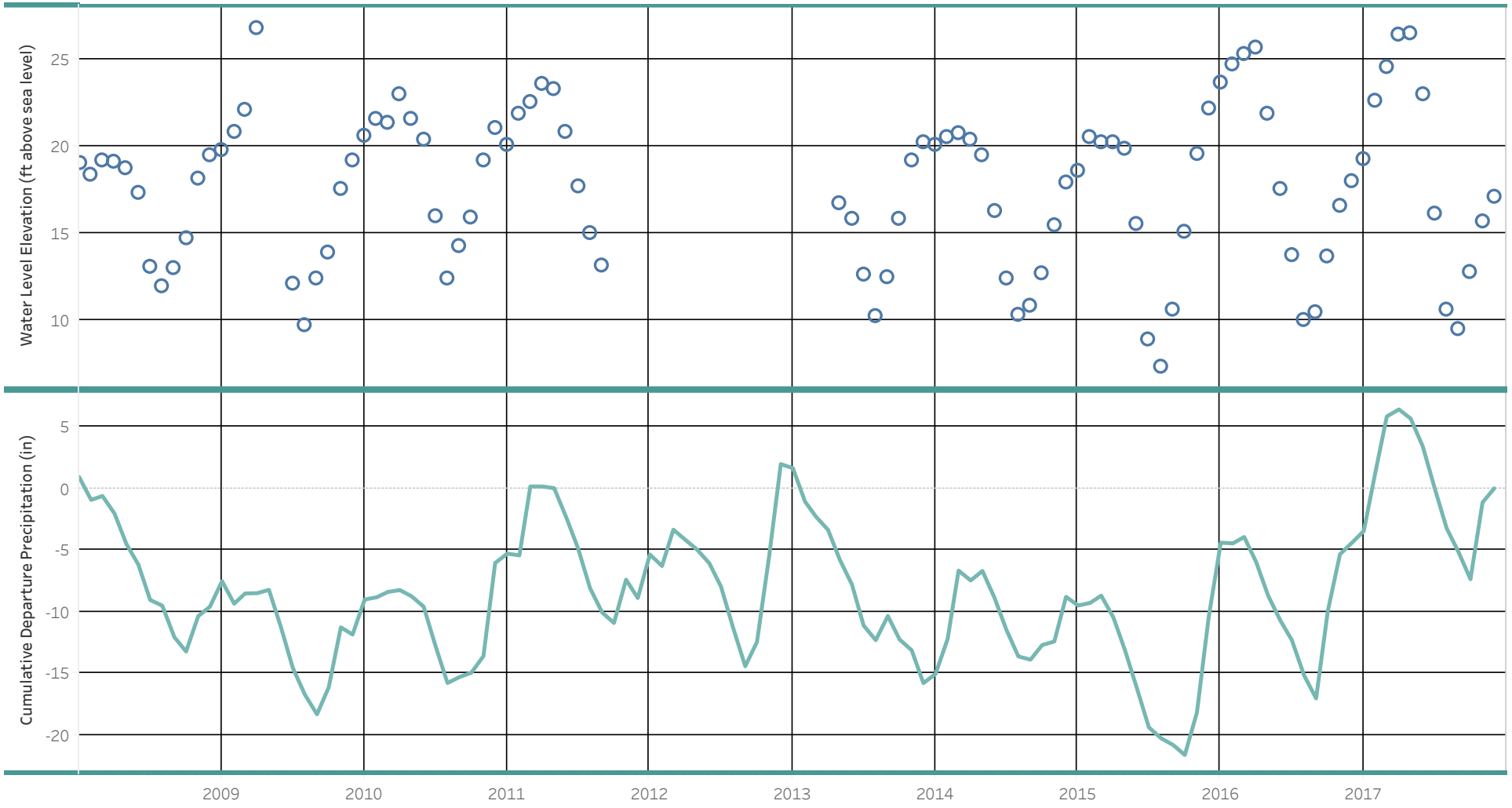


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Johnson Farm spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.14 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - Meigs Farm (FBA Aquifer)

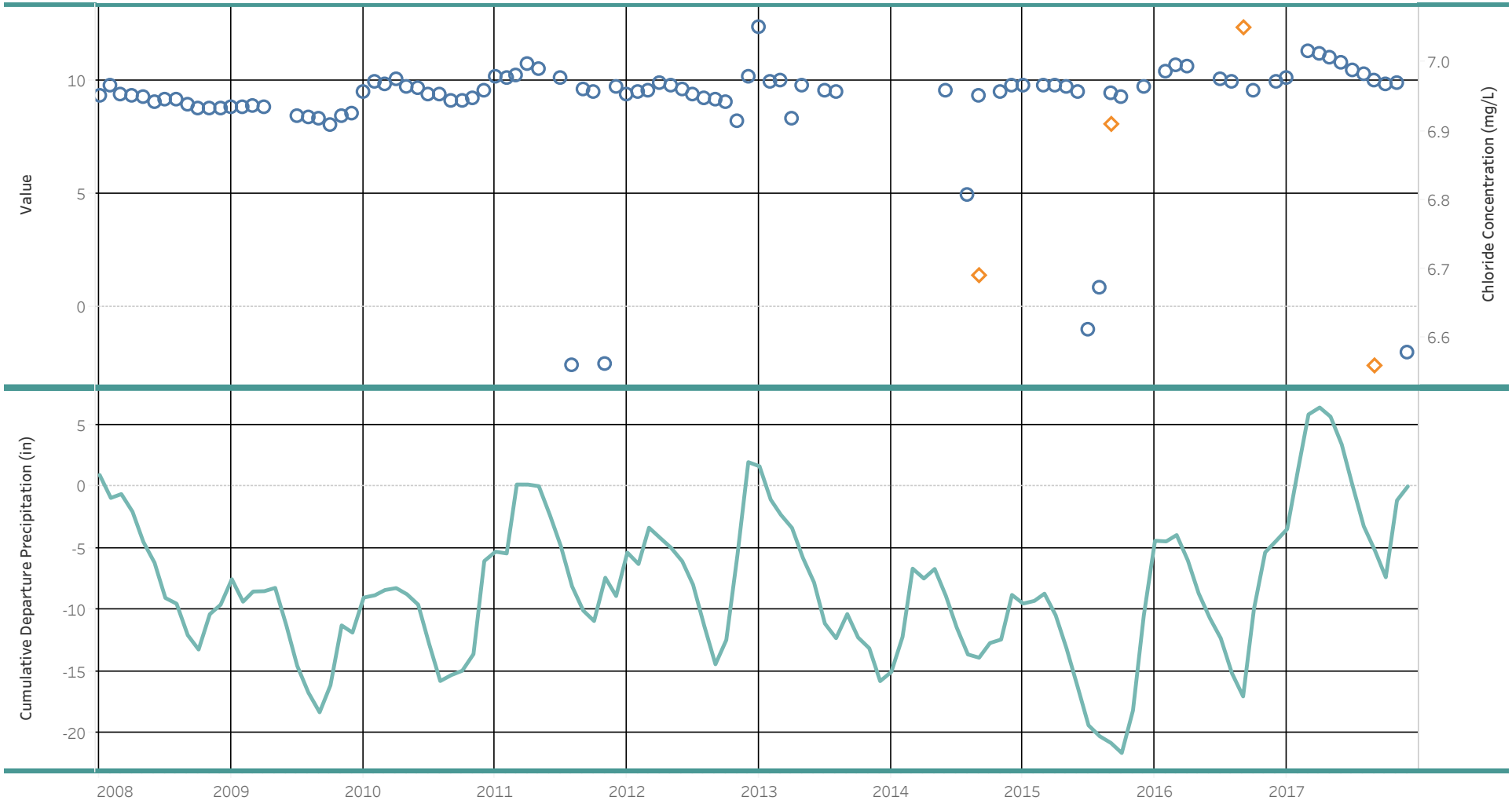


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Meigs Farm spans 10 years, which included a maximum data collection gap (in months) of: 1.7. Estimated static water level trend is -0.06 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - Messenger House (SLA Aquifer)

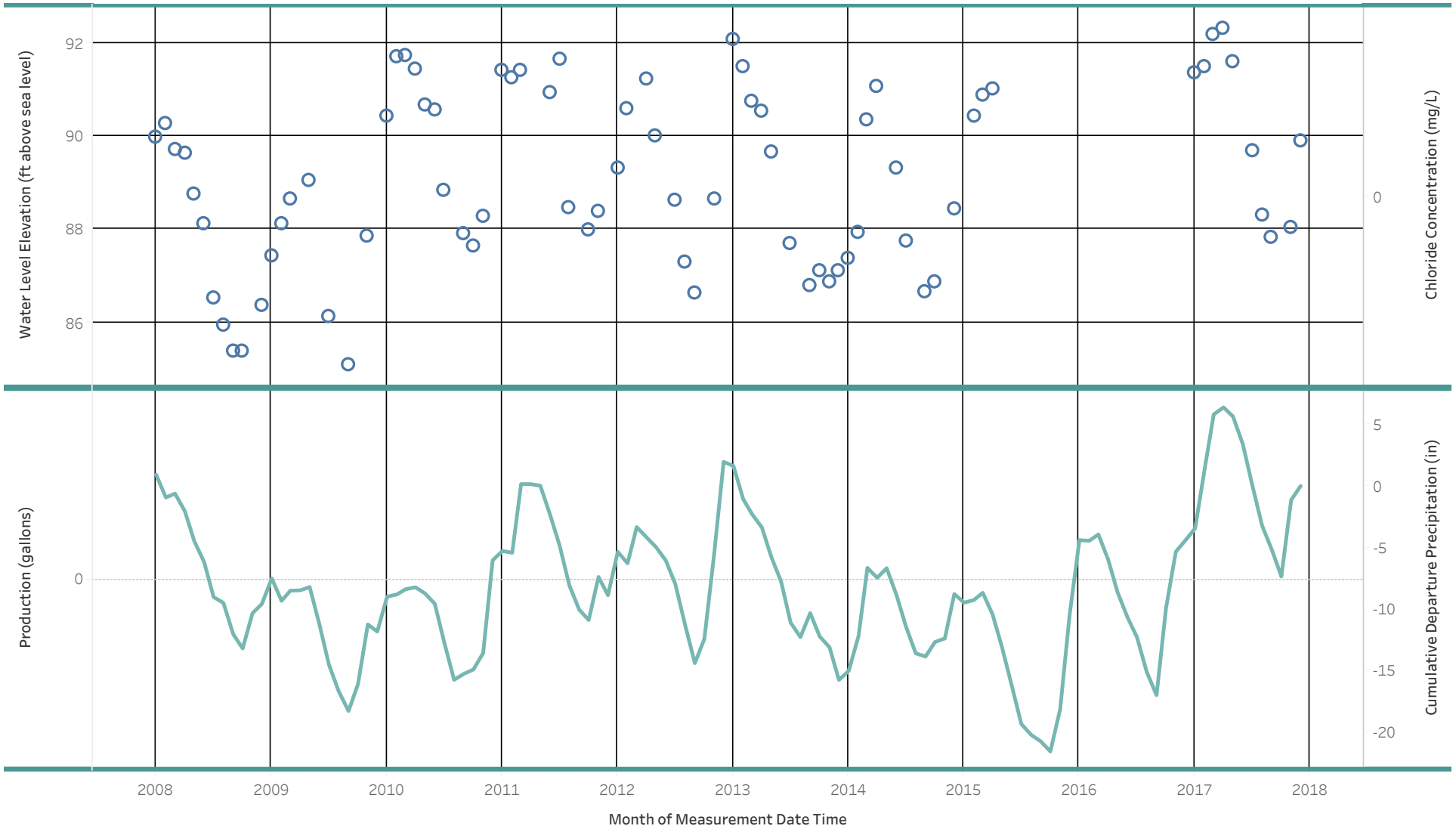


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Messenger House spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - North Bainbridge Well 01 (SPA Aquifer)

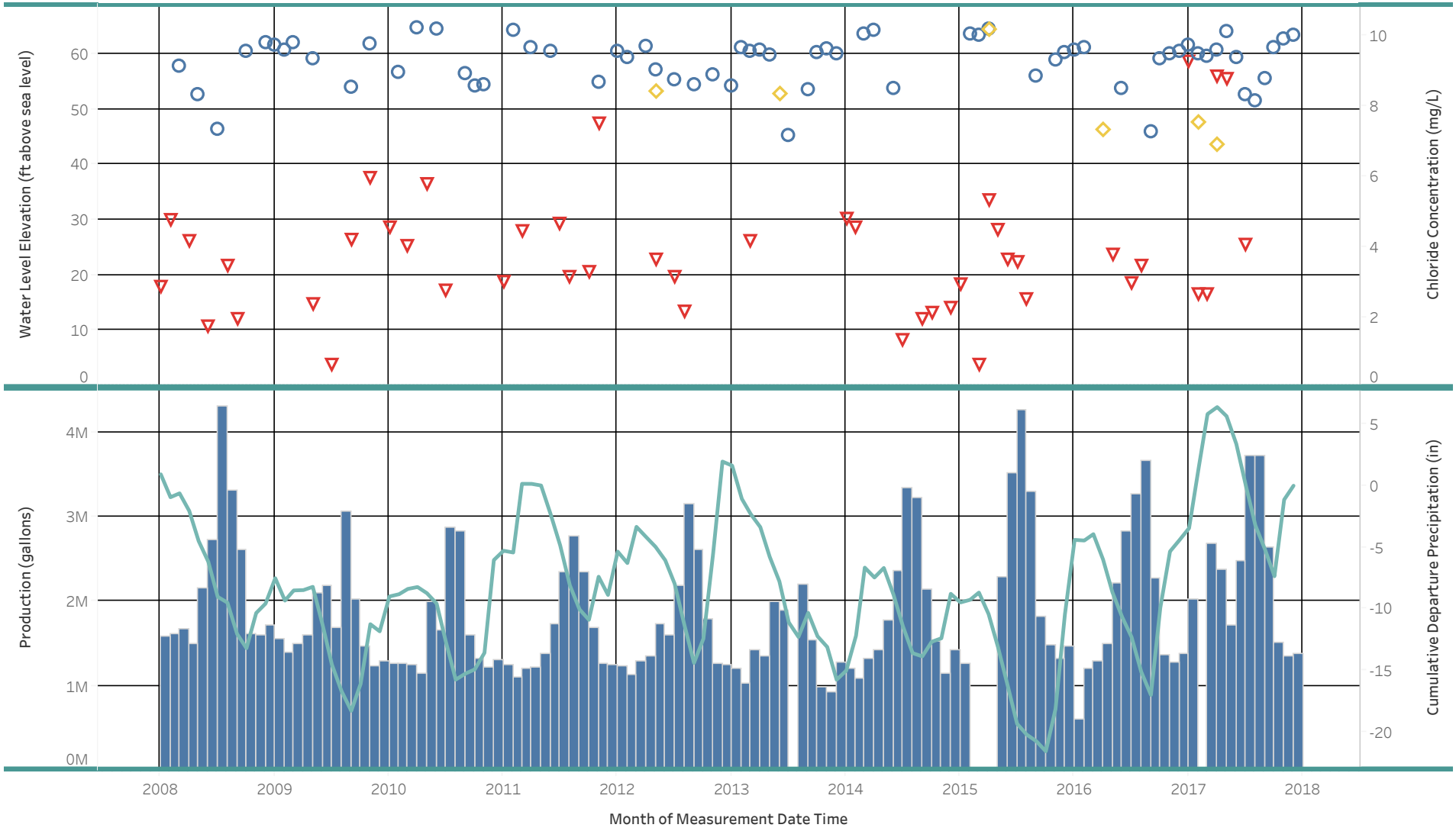


This chart displays a summary of water level data presented as a monthly average.
Static water level data for North Bainbridge Well 01 spans 10 years, which included a maximum data collection gap (in months) of: 21.5. Estimated static water level trend is 0.16 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - North Bainbridge Well 03 (SLA Aquifer)

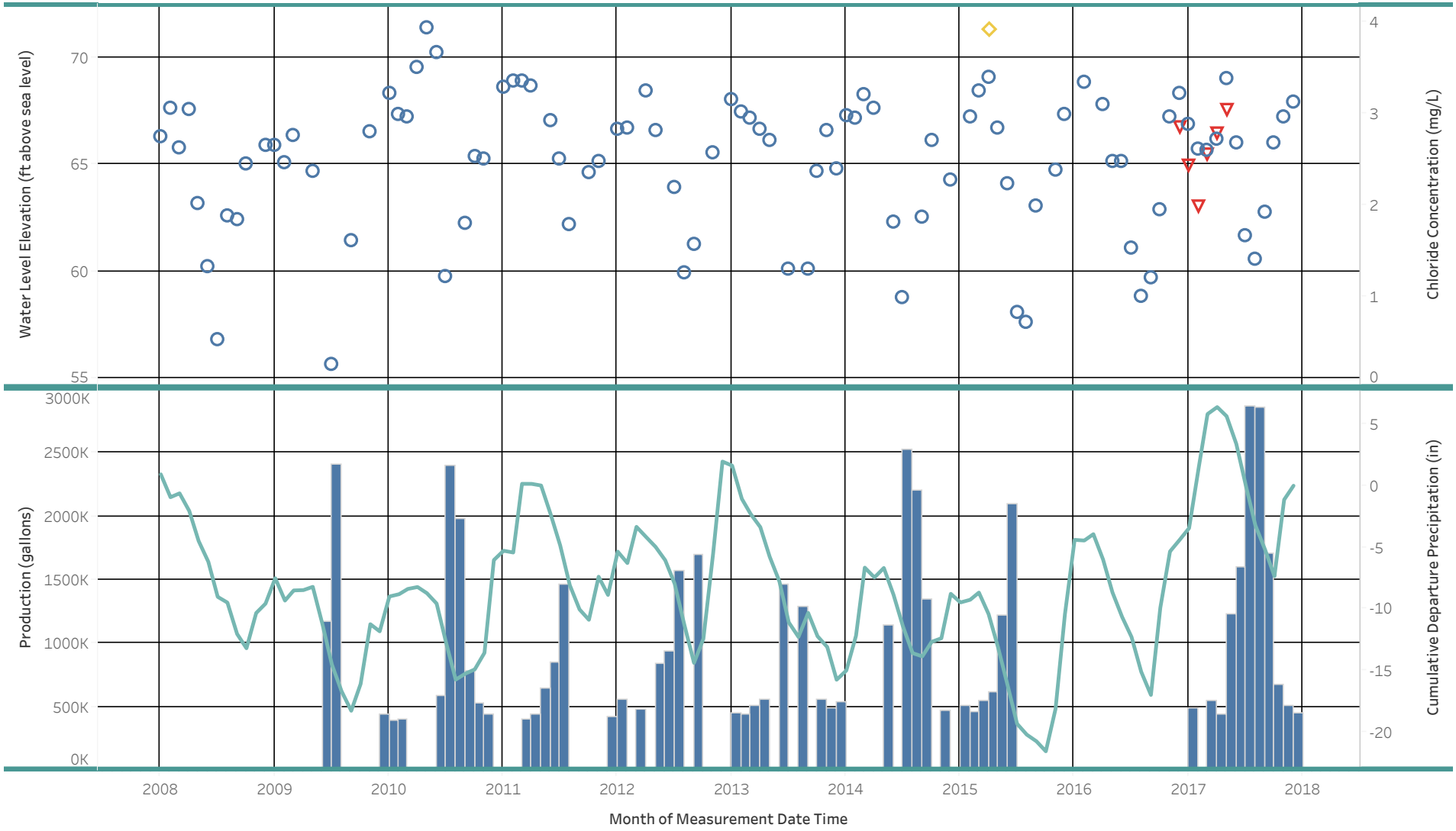


This chart displays a summary of water level data presented as a monthly average.
Static water level data for North Bainbridge Well 03 spans 10 years, which included a maximum data collection gap (in months) of: 7.7. Estimated static water level trend is 0.09 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - North Bainbridge Well 06 (SLA Aquifer)

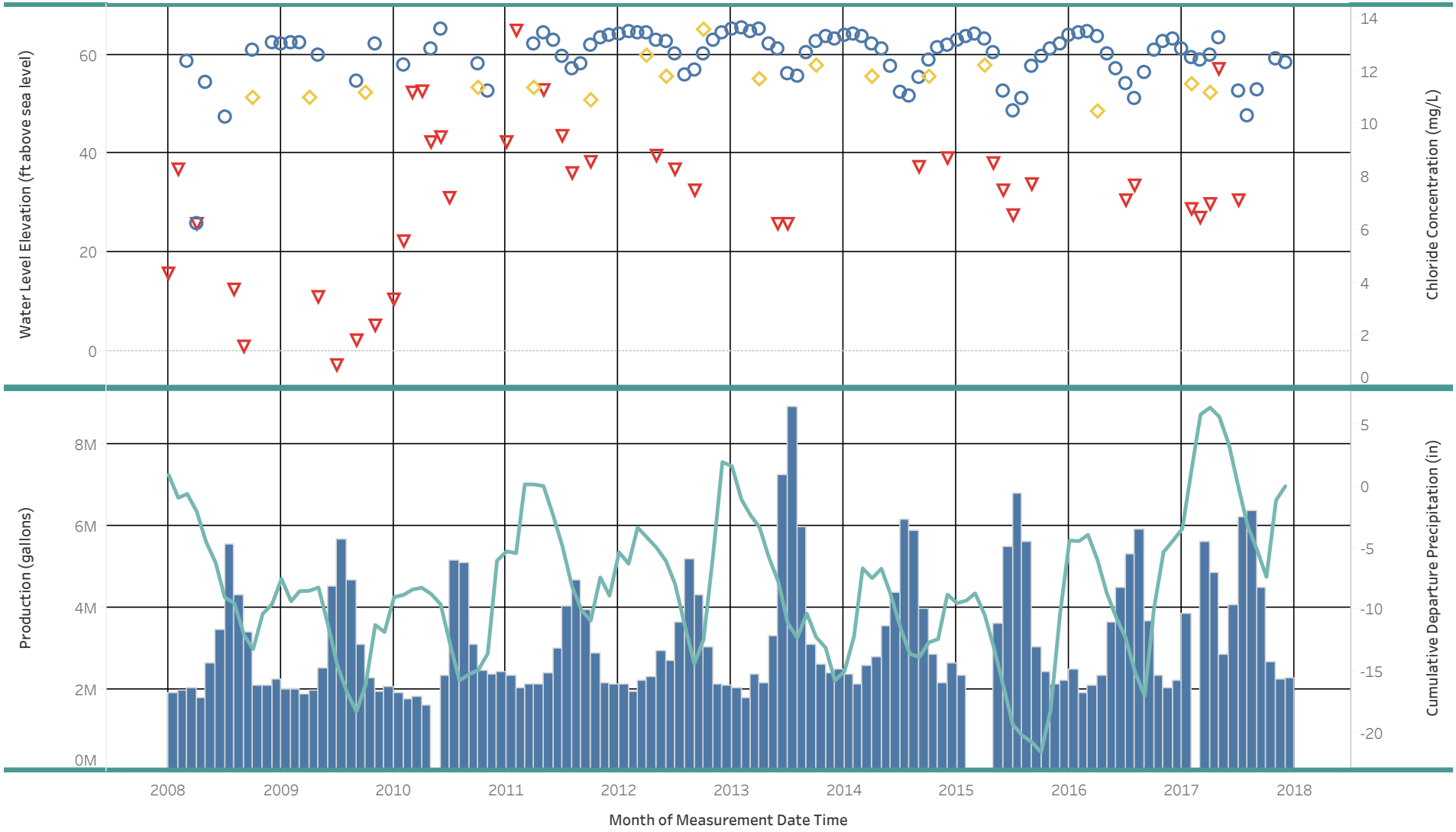


This chart displays a summary of water level data presented as a monthly average.
Static water level data for North Bainbridge Well 06 spans 10 years, which included a maximum data collection gap (in months) of: 2.5. Estimated static water level trend is -0.02 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - North Bainbridge Well 07 (SLA Aquifer)

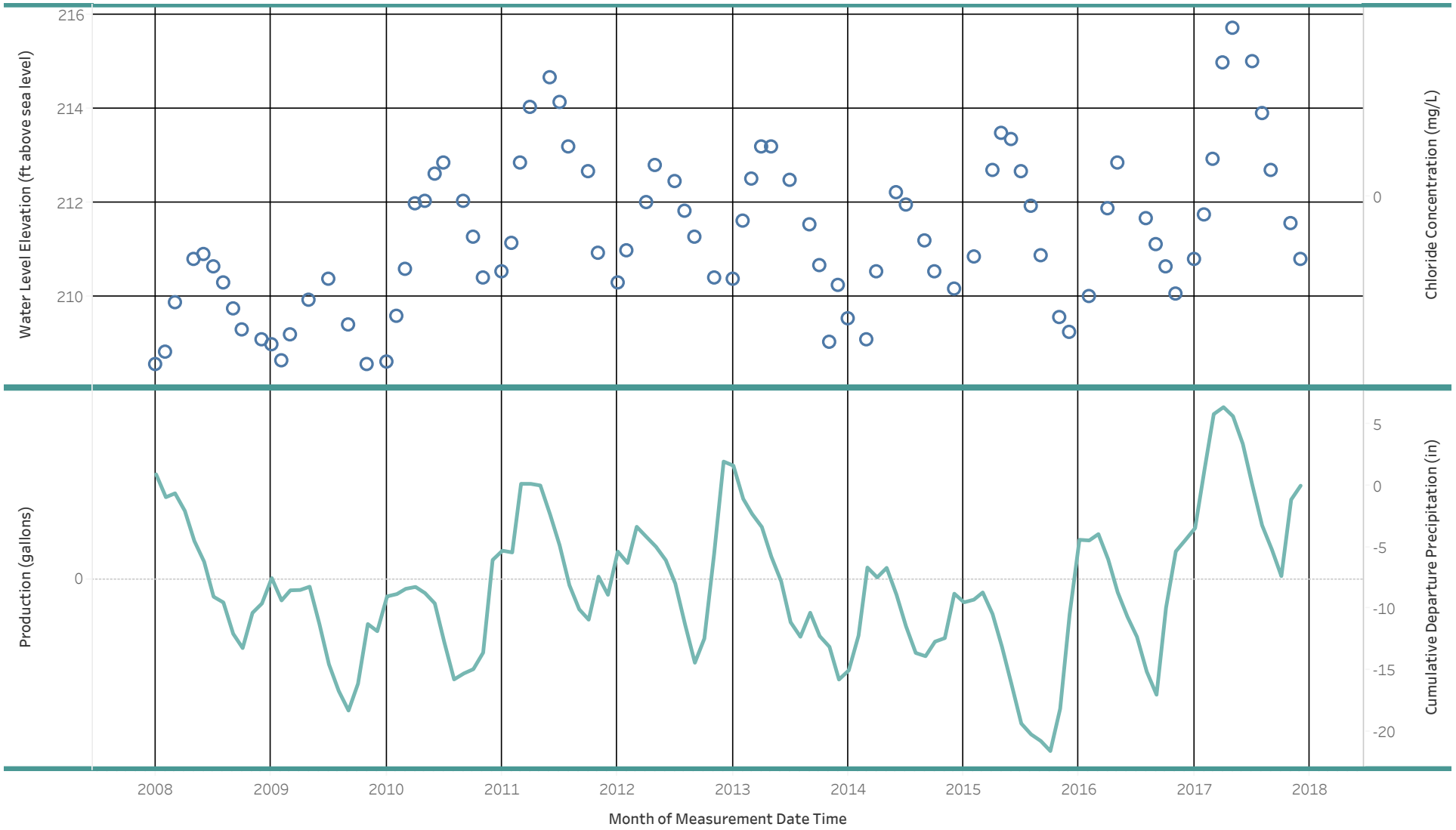


This chart displays a summary of water level data presented as a monthly average.
Static water level data for North Bainbridge Well 07 spans 10 years, which included a maximum data collection gap (in months) of: 4.5. Estimated static water level trend is 0.07 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - North Bainbridge Well 08 (PA Aquifer)

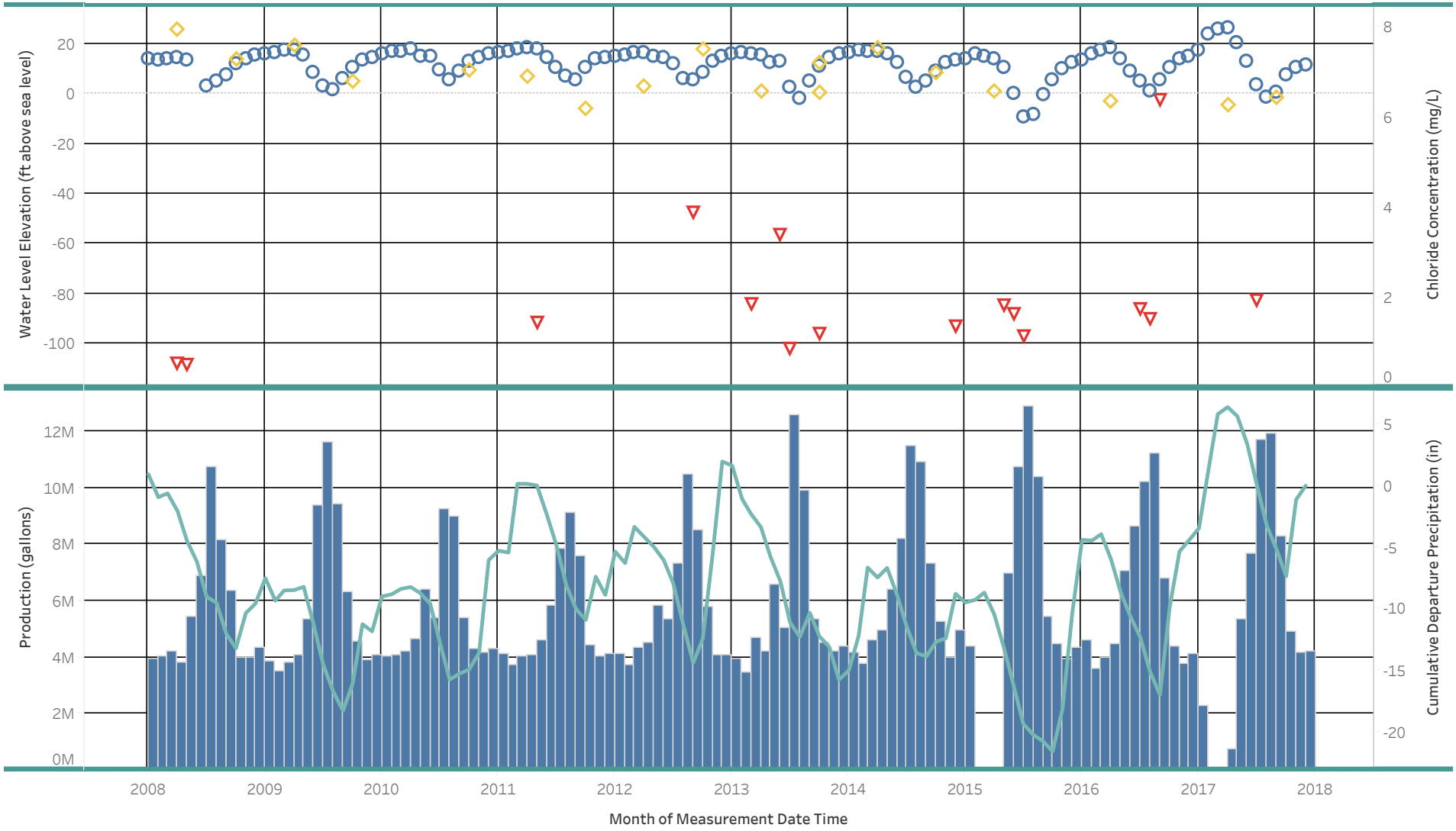


This chart displays a summary of water level data presented as a monthly average.
Static water level data for North Bainbridge Well 08 spans 10 years, which included a maximum data collection gap (in months) of: 2.8. Estimated static water level trend is 0.23 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - North Bainbridge Well 09 (FBA Aquifer)

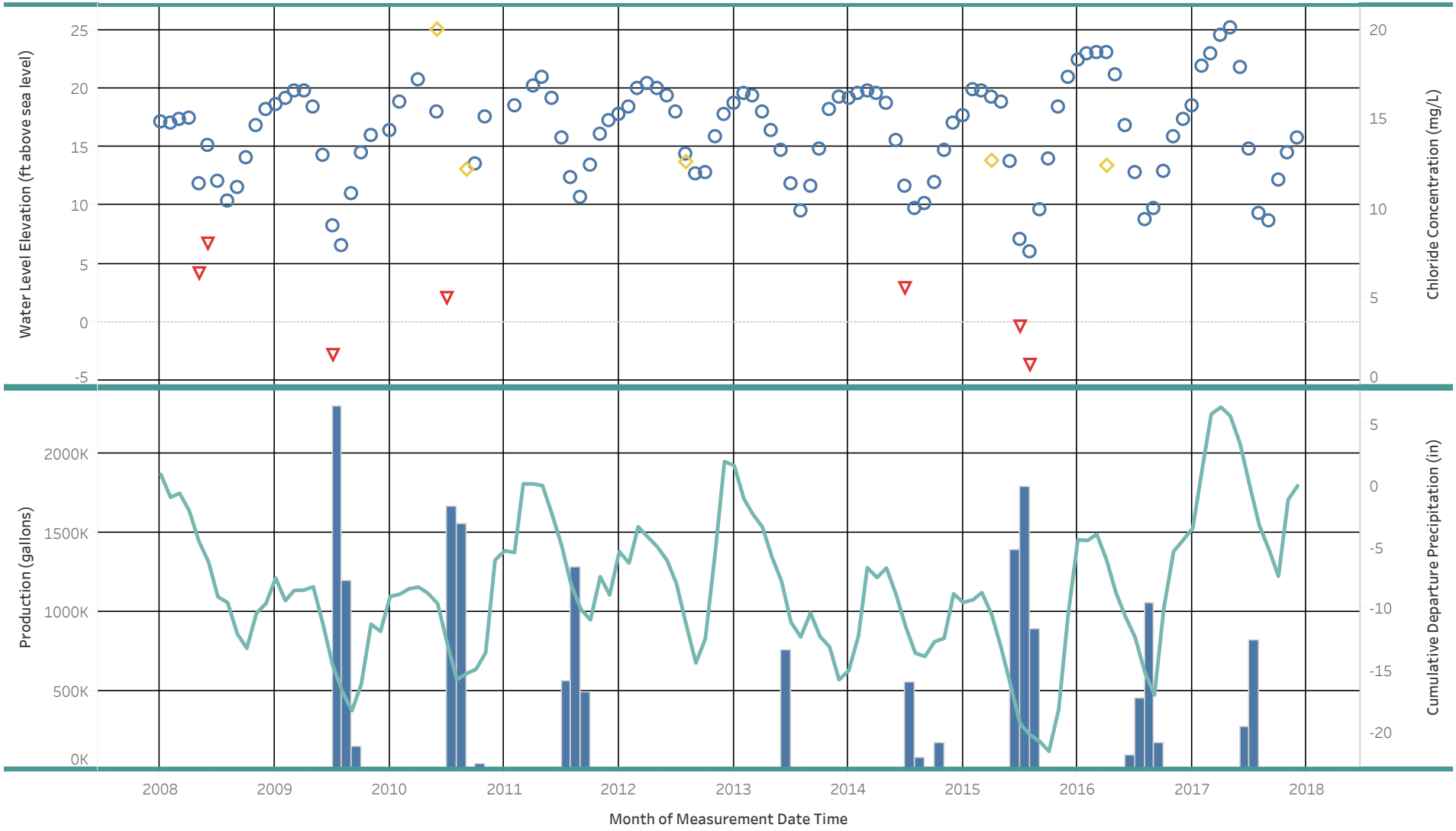


This chart displays a summary of water level data presented as a monthly average.
Static water level data for North Bainbridge Well 09 spans 10 years, which included a maximum data collection gap (in months) of: 2.4. Estimated static water level trend is -0.25 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - North Bainbridge Well 10 (FBA Aquifer)

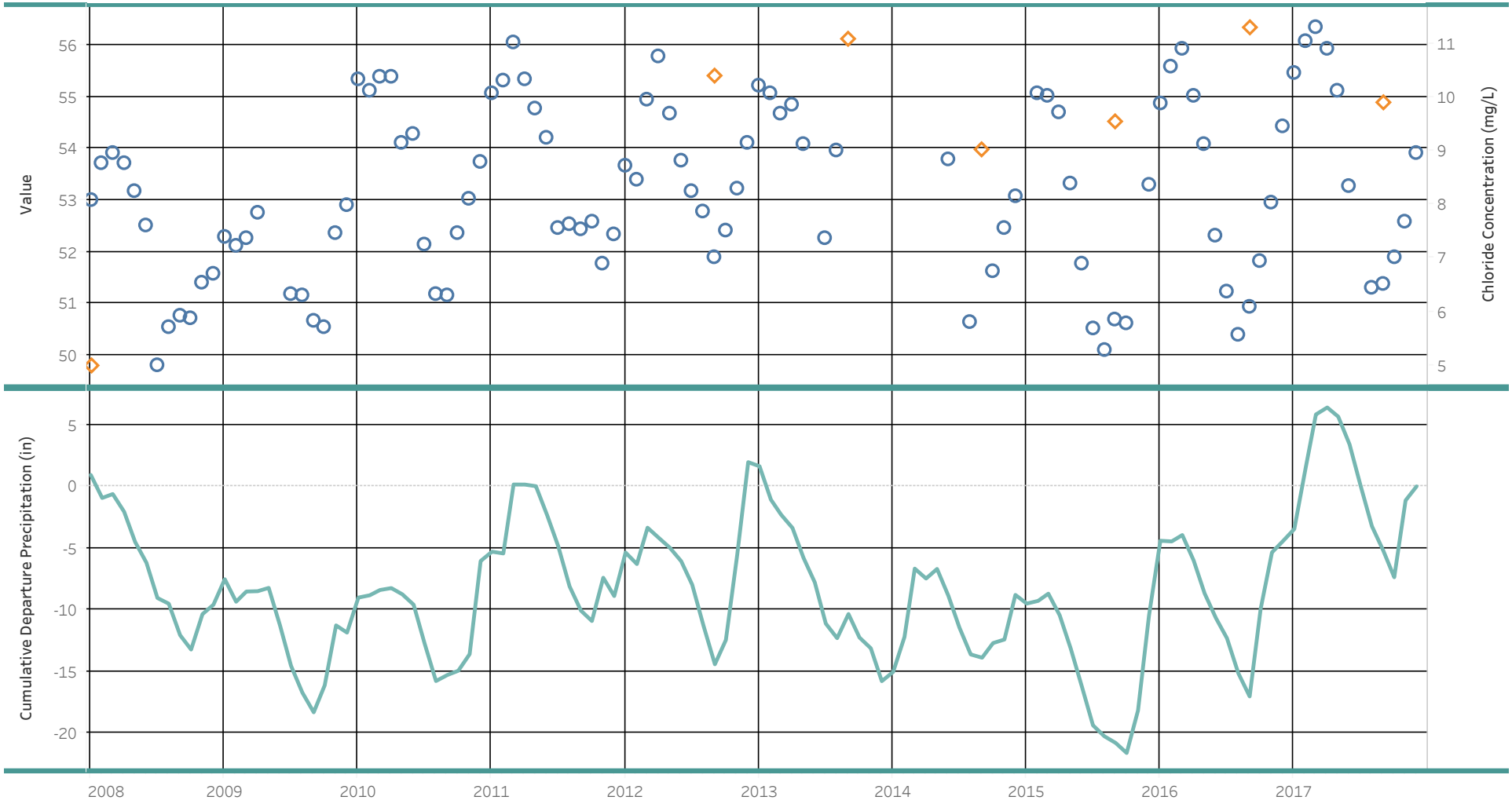


This chart displays a summary of water level data presented as a monthly average.
Static water level data for North Bainbridge Well 10 spans 10 years, which included a maximum data collection gap (in months) of: 4.1. Estimated static water level trend is 0.1 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - Onorato Water System (PA Aquifer)

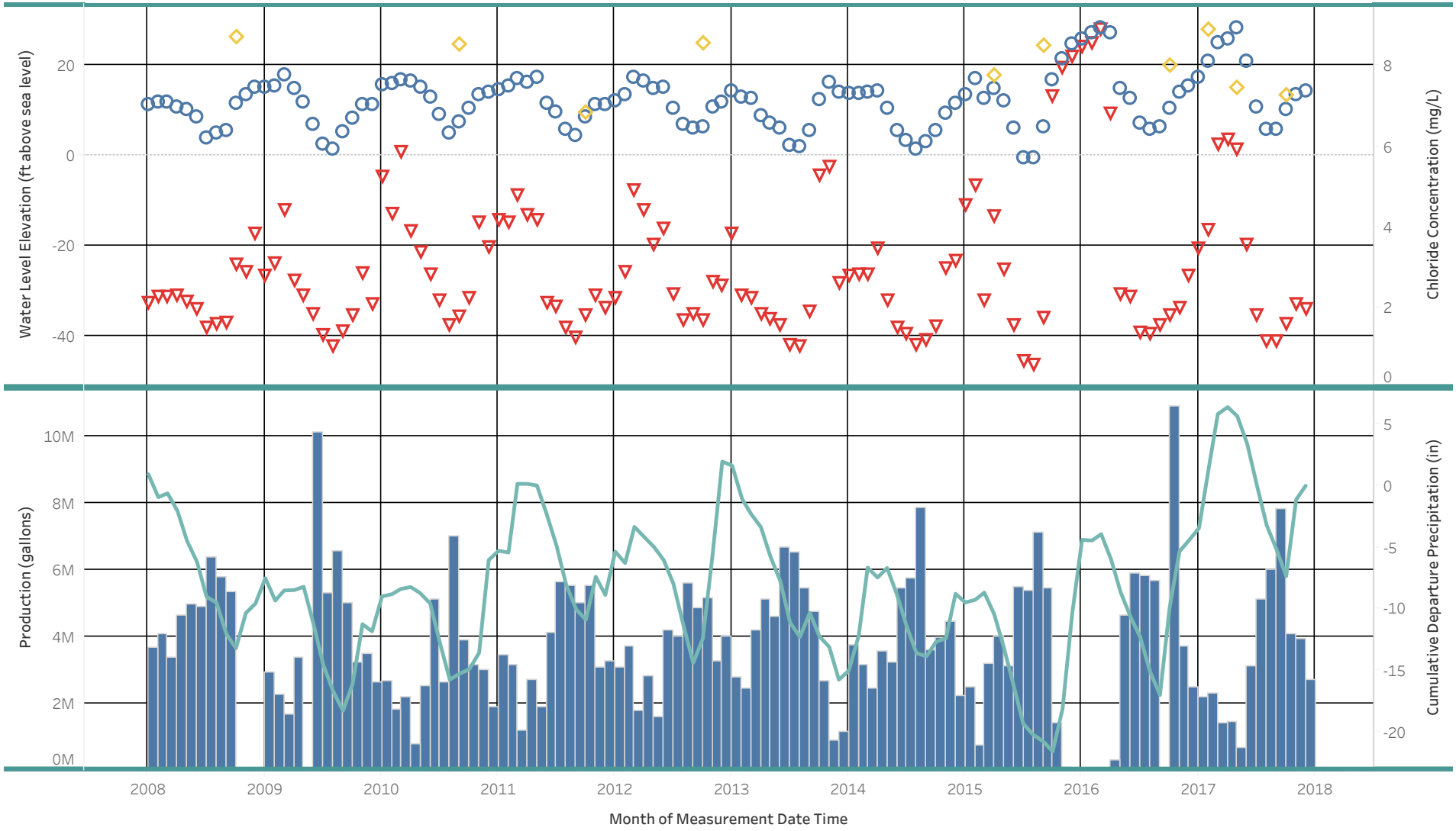


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Onorato Water System spans 10 years, which included a maximum data collection gap (in months) of: 10.3. Estimated static water level trend is 0.08 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - Sands Road 1 (FBA Aquifer)

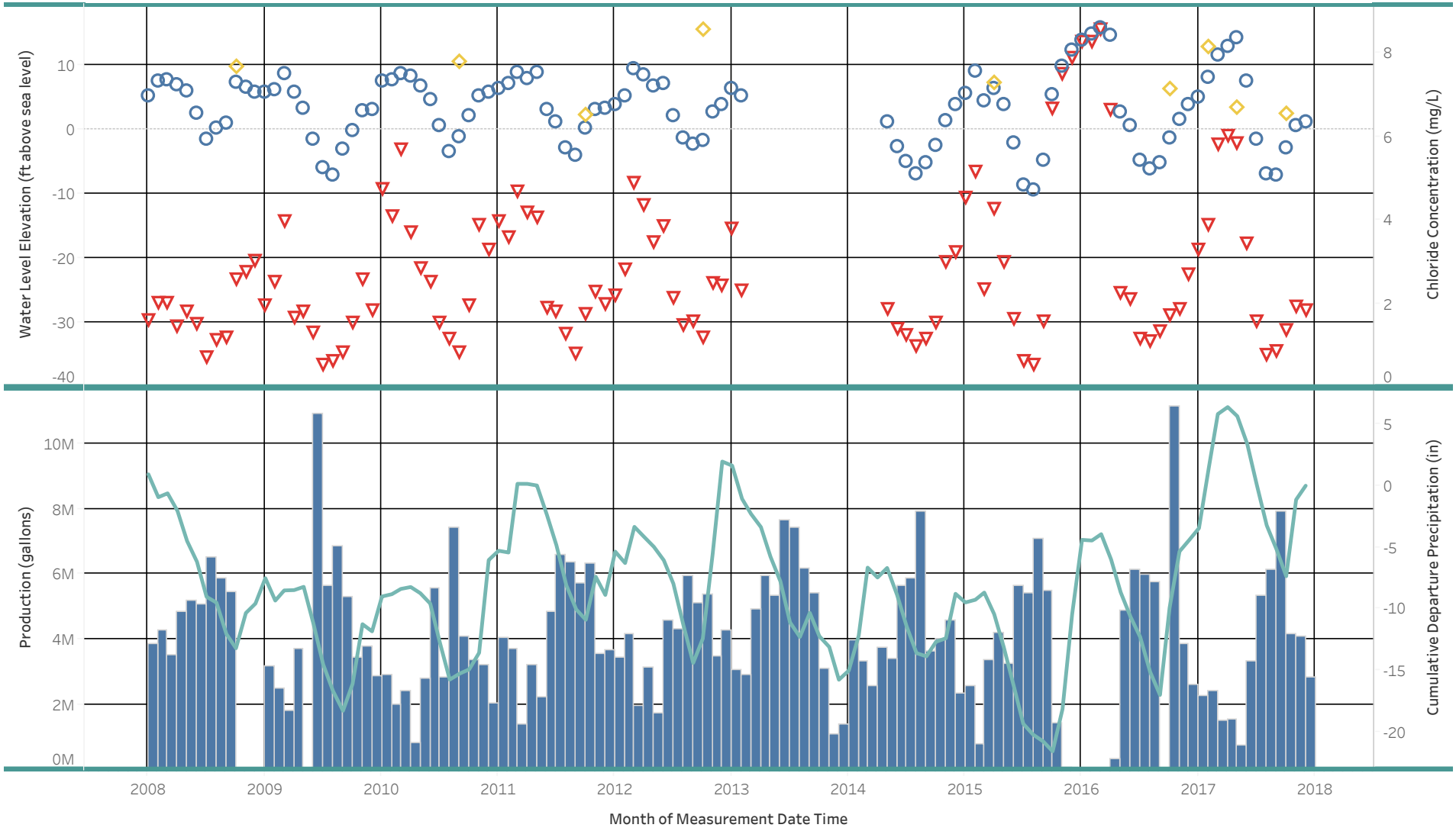


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Sands Road 1 spans 10 years, which included a maximum data collection gap (in months) of: 1.2. Estimated static water level trend is 0.45 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - Sands Road 2 (FBA Aquifer)

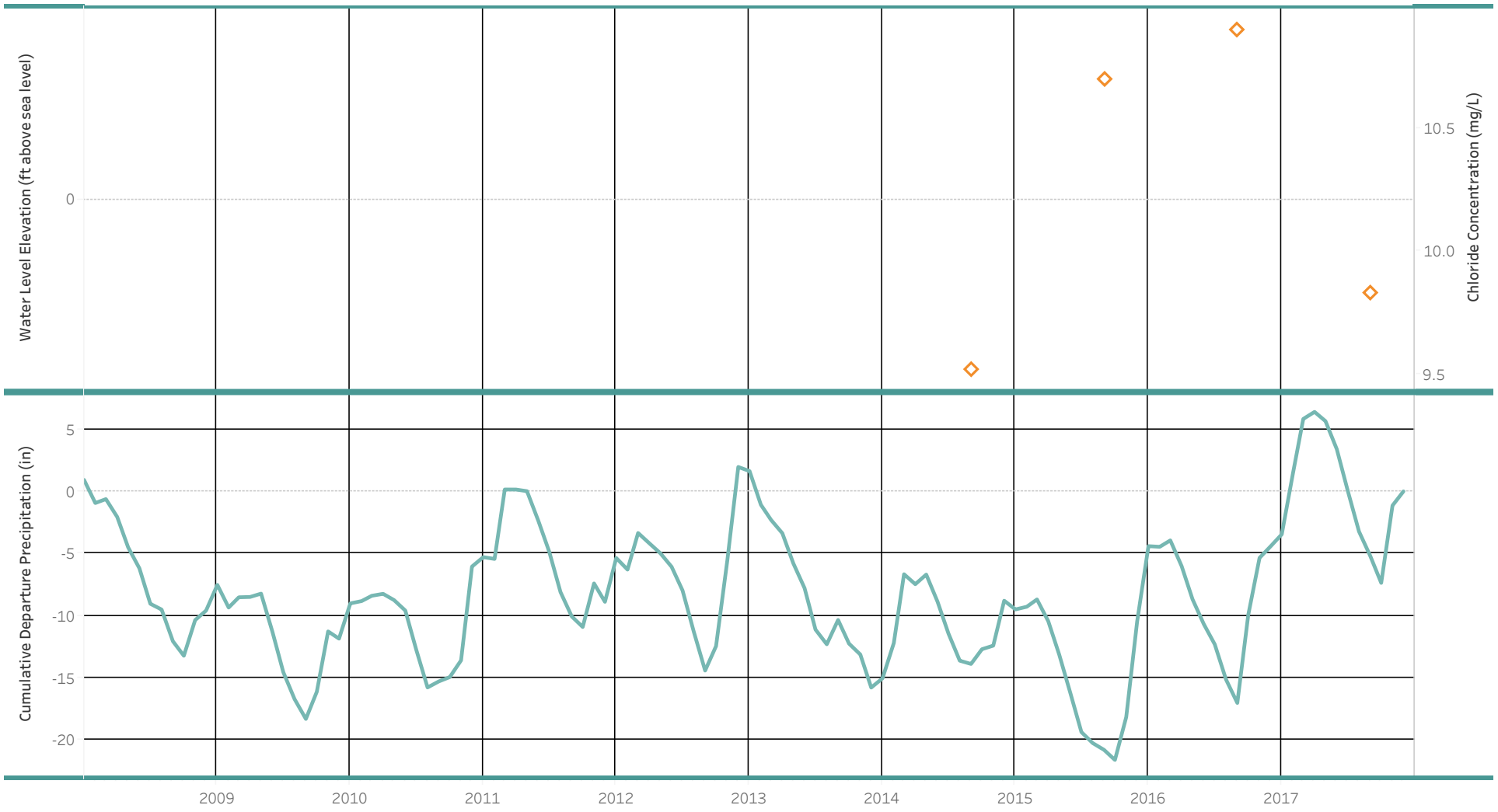


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Sands Road 2 spans 10 years, which included a maximum data collection gap (in months) of: 15.5. Estimated static water level trend is -0.14 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - Seabold, Chloride (FBA Aquifer)



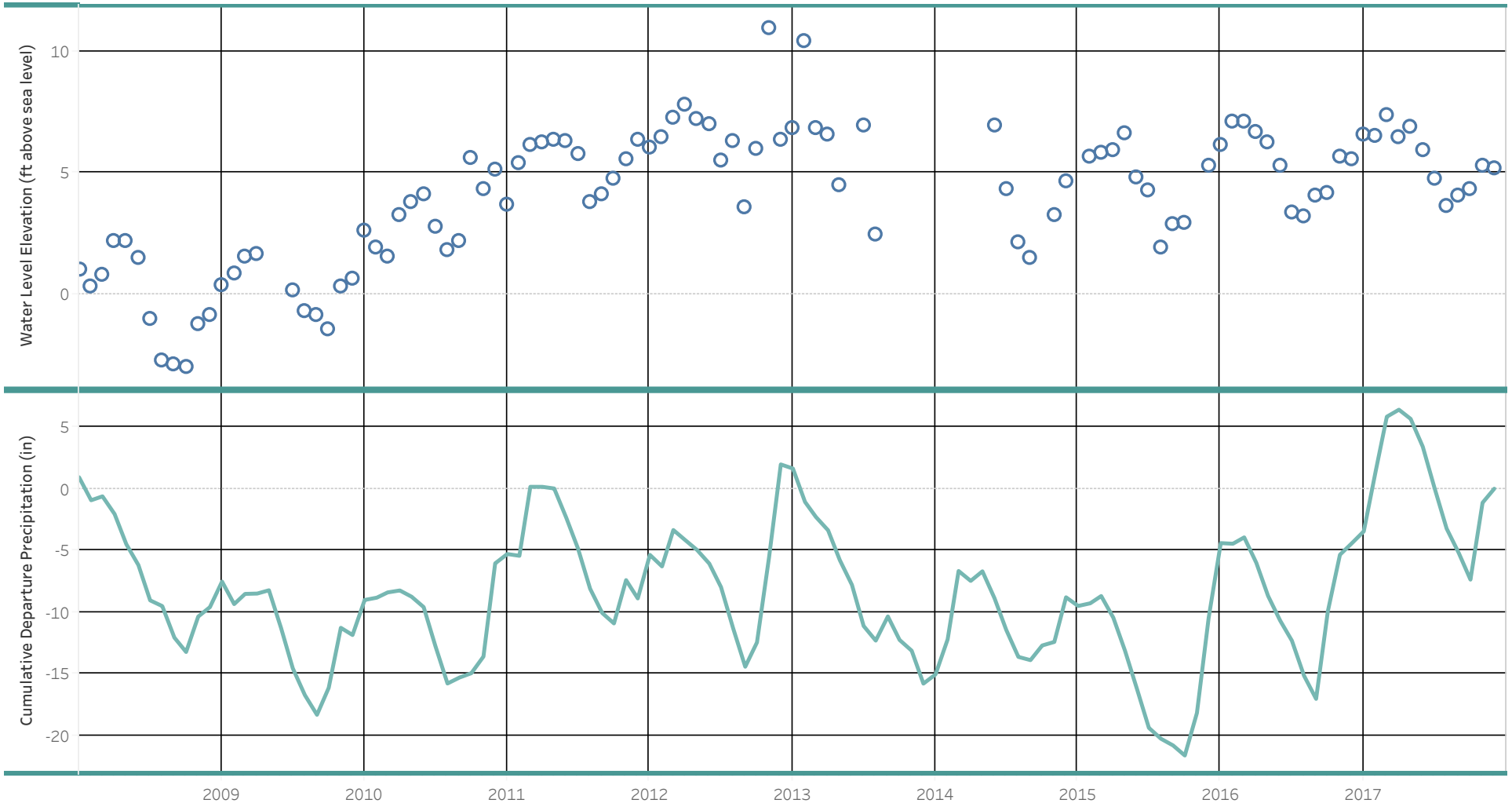
This chart displays a summary of water level data presented as a monthly average.
Static water level data for Seabold, Chloride are not available, including a maximum data collection gap (in months) of: None. No early warning level assessment applied due to insufficient data (at least 8 years of data required). None available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

Chloride Results

◇ Chloride Concentration

Well Summary - Seabold Water (SLA Aquifer)

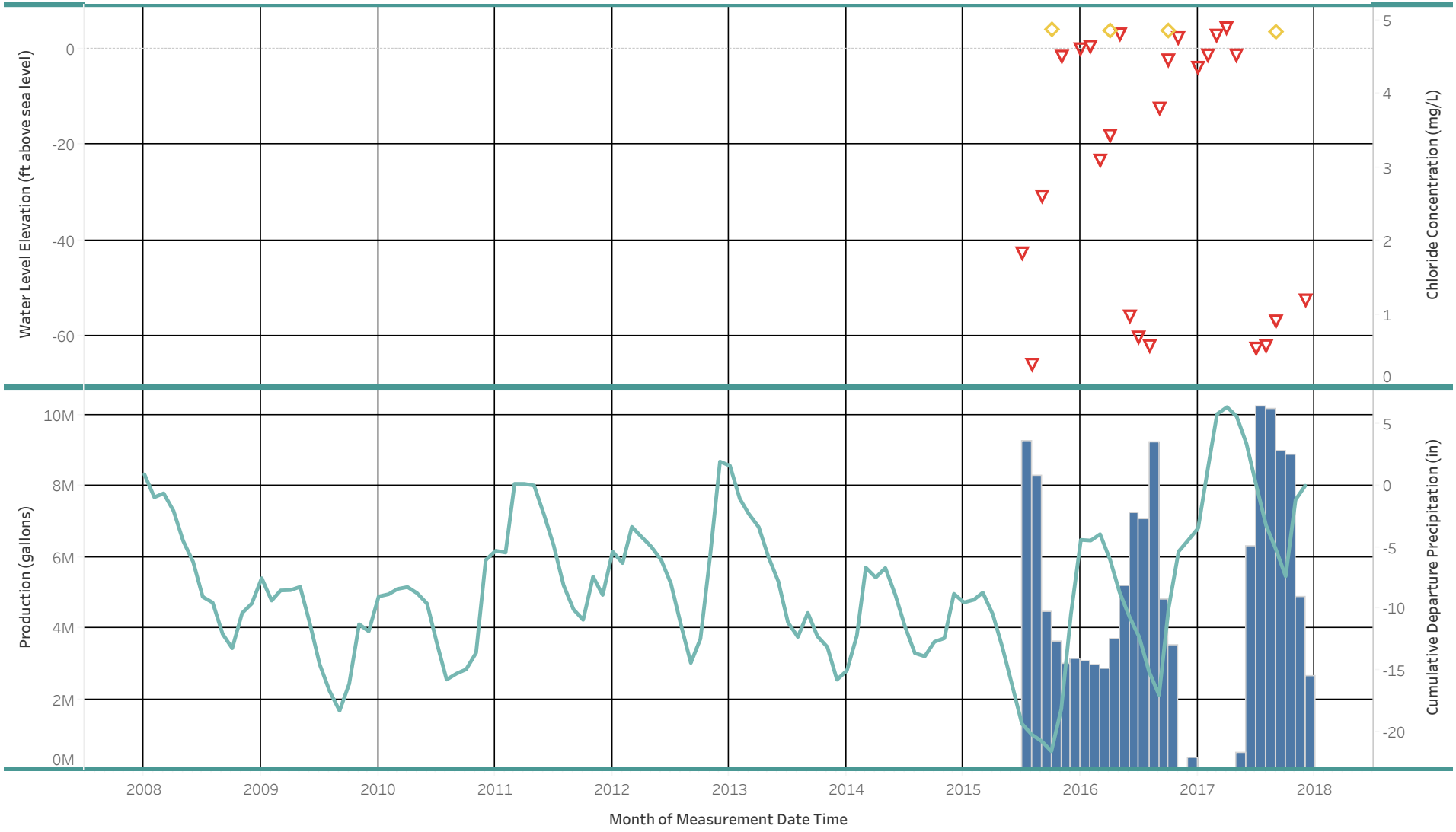


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Seabold Water spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.52 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level

Well Summary - South Bainbridge WS Well 7 (SLA Aquifer)

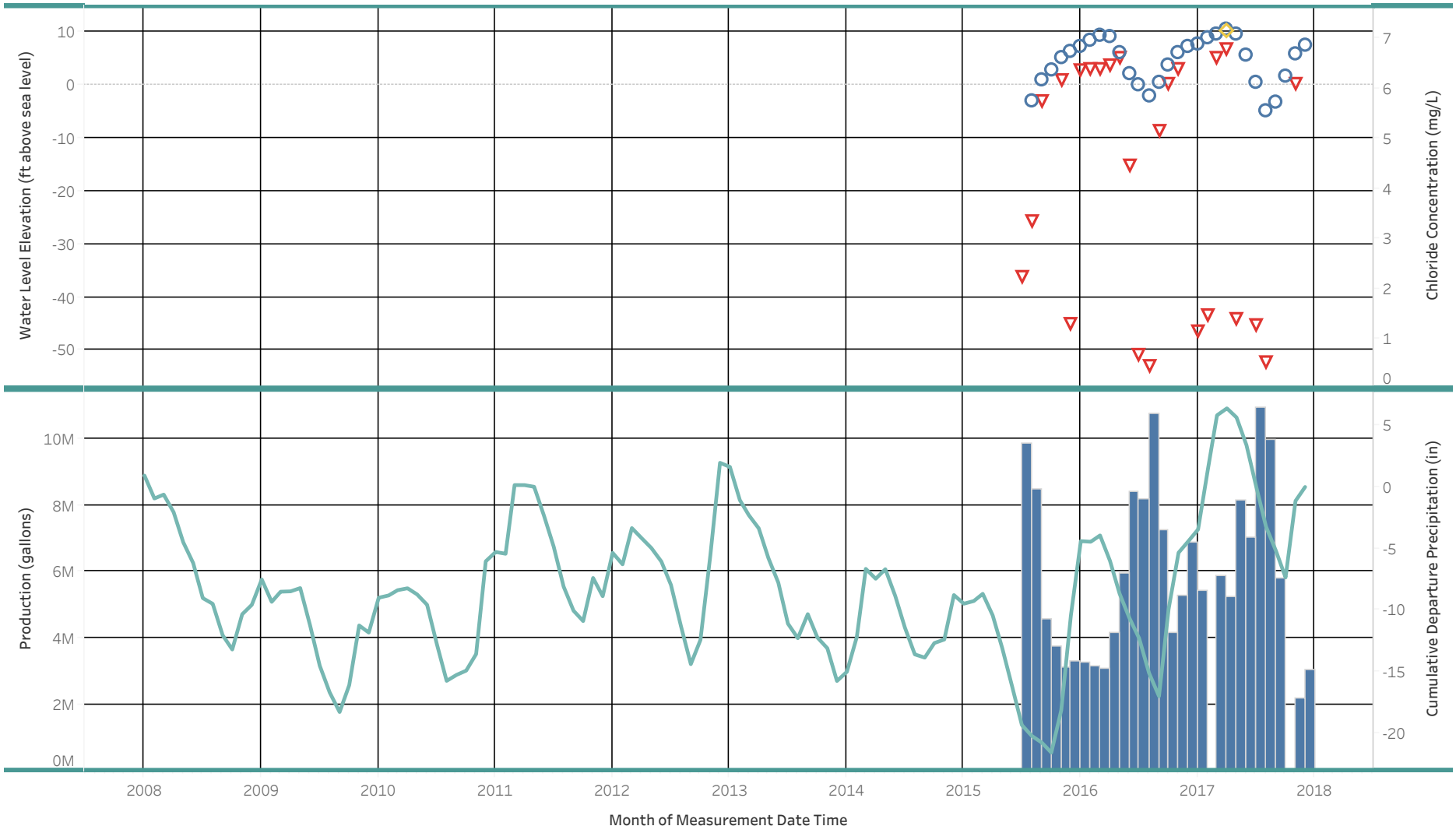


This chart displays a summary of water level data presented as a monthly average.
Static water level data for South Bainbridge WS Well 7 are not available, including a maximum data collection gap (in months) of: None. No early warning level assessment applied due to insufficient data (at least 8 years of data required). None available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
▽ Water level influenced by pumping

Chloride Results
◇ Chloride Concentration

Well Summary - South Bainbridge WS Well 8 (SLA Aquifer)

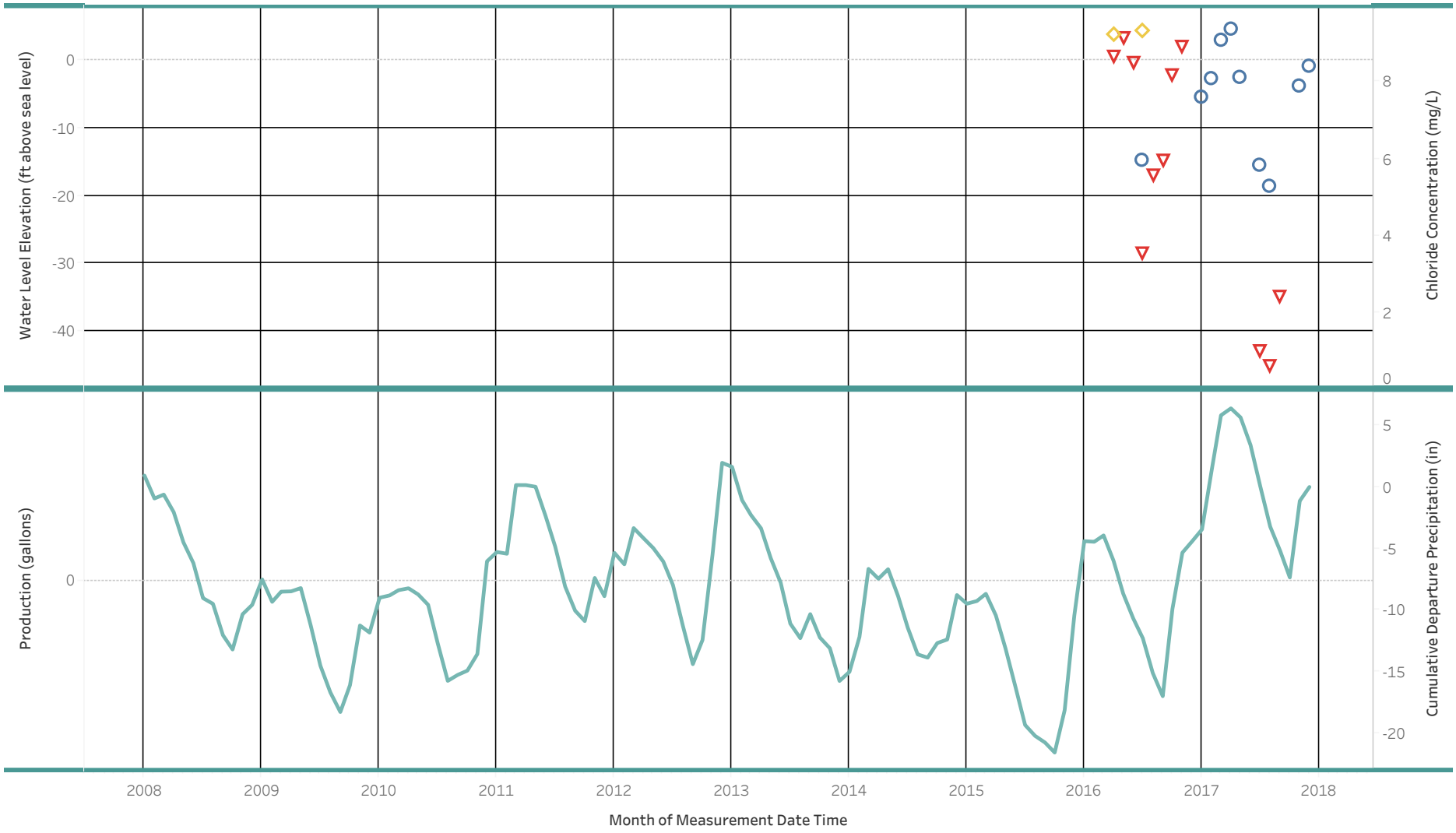


This chart displays a summary of water level data presented as a monthly average.
Static water level data for South Bainbridge WS Well 8 spans 2 years, which included a maximum data collection gap (in months) of: 1.3. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 2 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - South Bainbridge WS Well 9 (SLA Aquifer)

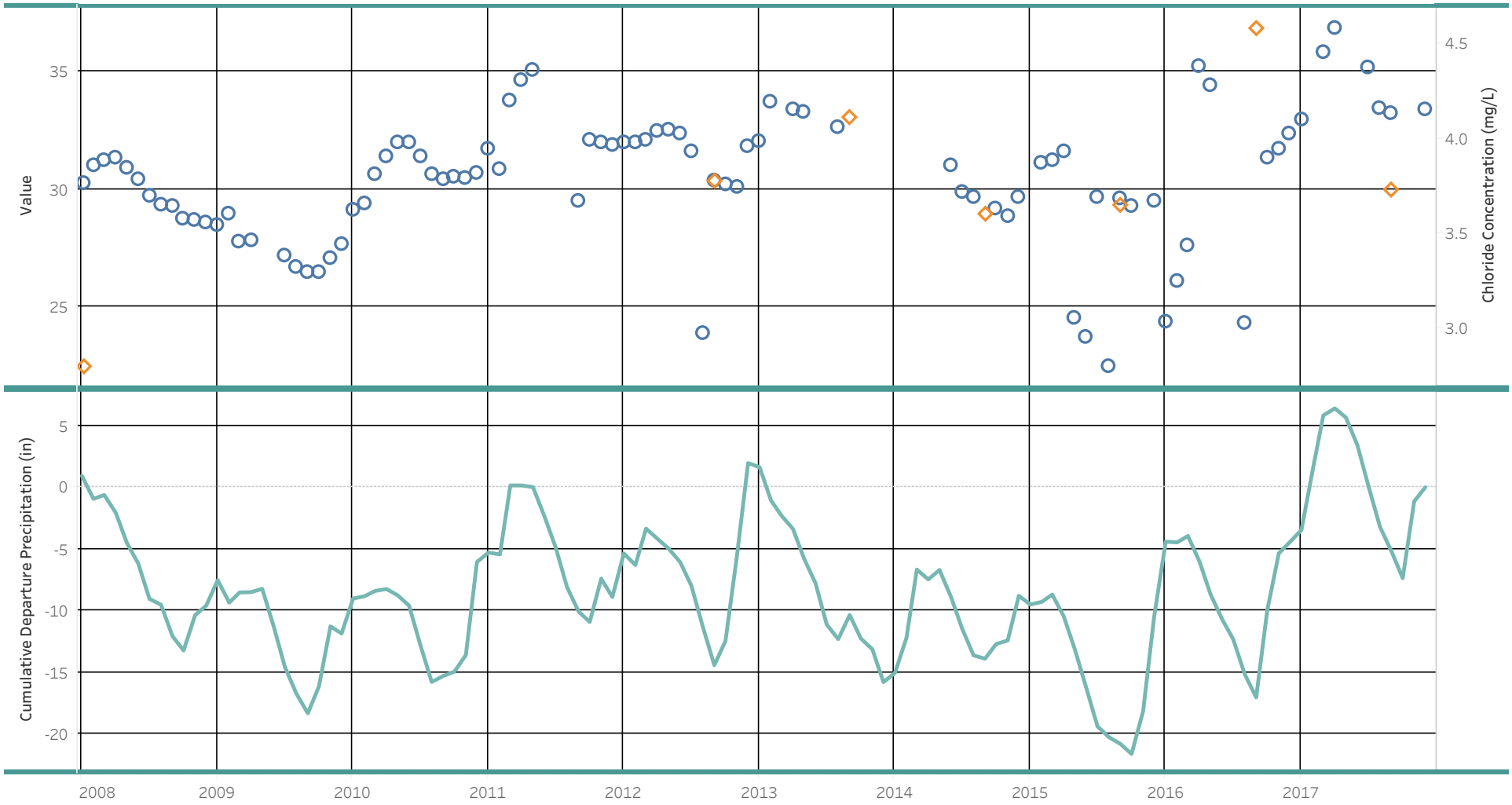


This chart displays a summary of water level data presented as a monthly average.
Static water level data for South Bainbridge WS Well 9 spans 1 years, which included a maximum data collection gap (in months) of: 6.1. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 1 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- Static Water Level
- Water level influenced by pumping

Chloride Results
- Chloride Concentration

Well Summary - Tara Lane Community Well (PA Aquifer)

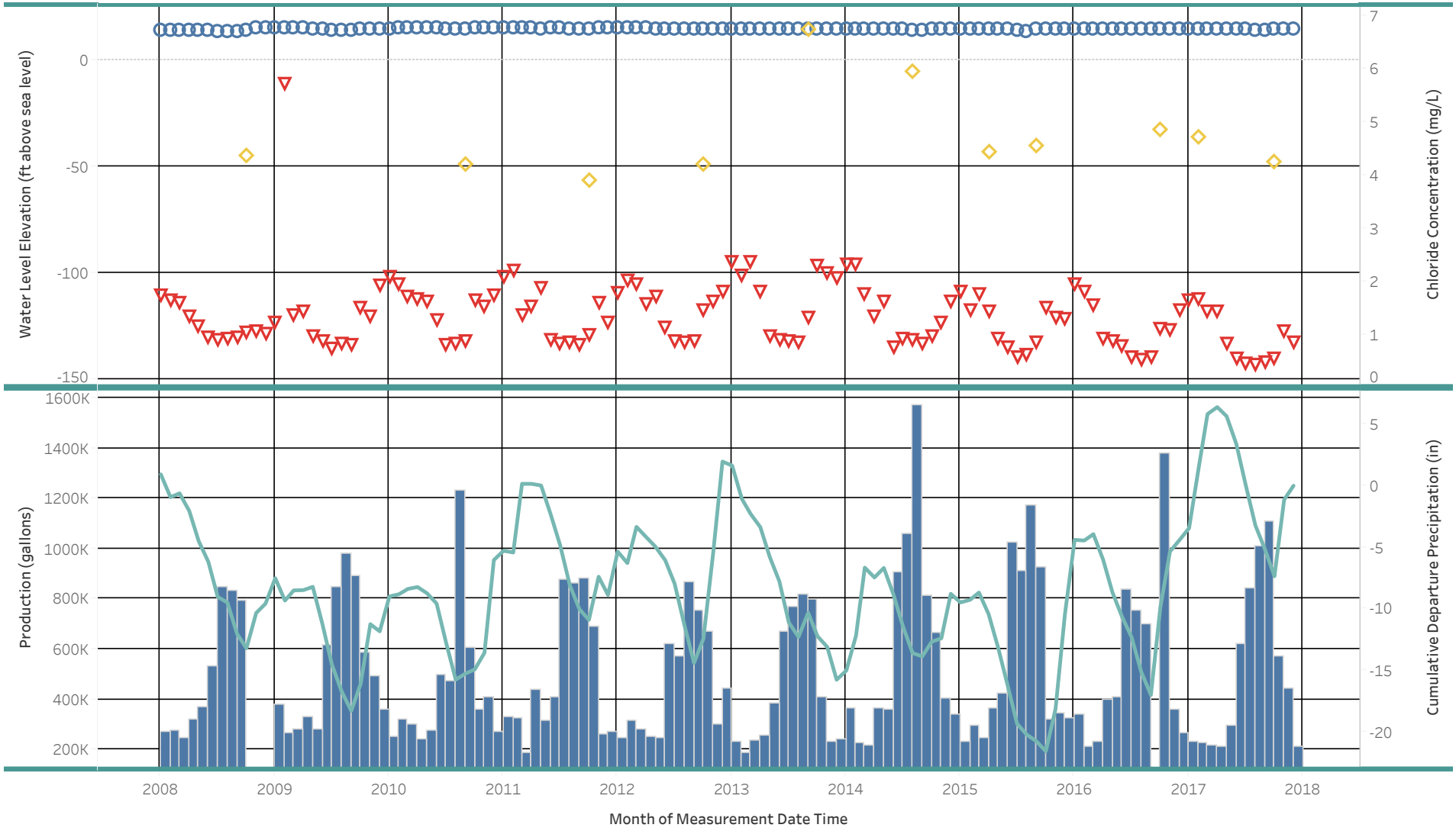


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Tara Lane Community Well spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is 0.16 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - Taylor Road Well (GMA Aquifer)

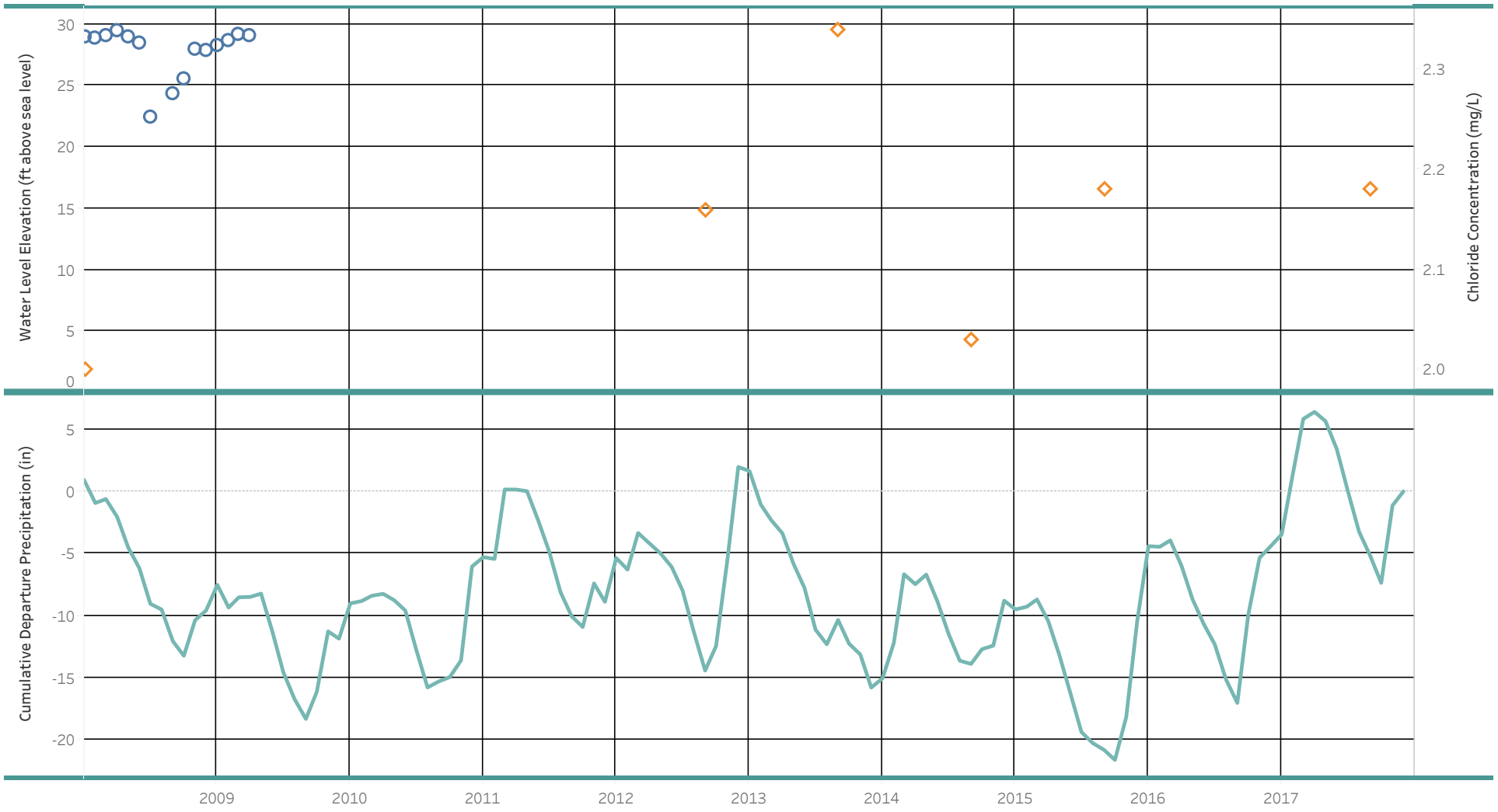


This chart displays a summary of water level data presented as a monthly average.
Static water level data for Taylor Road Well spans 10 years, which included a maximum data collection gap (in months) of: 1.4. Estimated static water level trend is 0.01 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
- ○ Static Water Level
- ▽ Water level influenced by pumping

Chloride Results
- ◇ Chloride Concentration

Well Summary - West Port Madison Water System (SLA Aquifer)

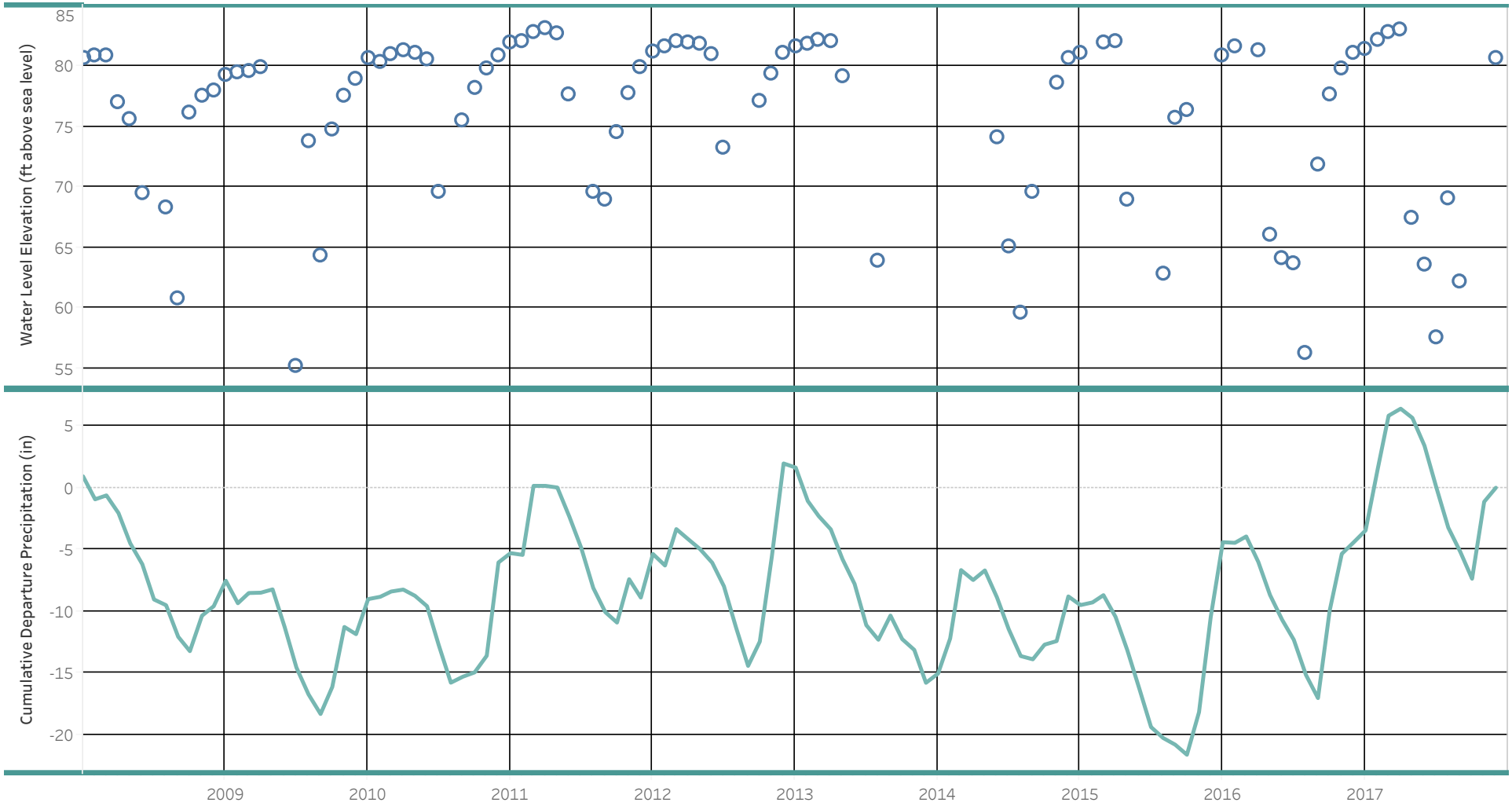


This chart displays a summary of water level data presented as a monthly average.
Static water level data for West Port Madison Water System spans 1 years, which included a maximum data collection gap (in months) of: 1.9. No early warning level assessment applied due to insufficient data (at least 8 years of data required). 1 years of data available.
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status
○ Static Water Level

Chloride Results
◇ Chloride Concentration

Well Summary - Wing Point COBI (SLA Aquifer)



This chart displays a summary of water level data presented as a monthly average.
Static water level data for Wing Point COBI spans 10 years, which included a maximum data collection gap (in months) of: 10.2. Estimated static water level trend is -0.45 (ft/year).
Water level trend calculations are based on an ordinary least squares (OLS) fit to the monthly average of all static water level data.
Cumulative Departure Precipitation (CDP) represents the running total of monthly differences from the average over the period. Downward trending sections typically indicate drier periods with lowered recharge, while upward trending segments indicate wetter than average periods with greater recharge.

Water Level Measurement Status

○ Static Water Level