



# SCOTTS VALLEY WATER DISTRICT

## **AGENDA PACKET**

### **REGULAR BOARD MEETING**

**04/08/21 at 6:00 p.m.**

This meeting is conducted in remote access format in compliance with Executive Order N-29-20.

Public participation is encouraged, join the meeting remotely through the meeting link: <https://zoom.us/j/91871975503>

Or by phone: 669 900 9128 Webinar ID: 918 7197 5503

The public has opportunities to make comments throughout the meeting: to comment online, use the raise hand option, by phone press \*9.

#### **BOARD OF DIRECTORS**

**Bill Ekwall, President**

**Ruth Stiles, Vice President**

**Wade Leishman, Director**

**Chris Perri, Director**

**Danny Reber, Director**

**Noelle Downing, Associate Director**

**Annie Finch Associate Director**

**Piret Harmon, General Manager**

## Water Industry Acronyms

AF – Acre Foot

AFY – Acre Foot per Year

ACWA – Association of California Water Agencies

ACWA JPIA – ACWA Joint Powers Insurance Authority

AWWA – American Water Works Association

BMP – Best Management Practices

CCR – Consumer Confidence Report

CD – Certificate of Deposit

CEQA - California Environmental Quality Act

CSDA – California Special District Association

DHS – Department of Health Services

DWR – Department of Water Resources

EIR – Environmental Impact Report

EPA – Environmental Protection Agency

FY – Fiscal Year

GASB – Governmental Accounting Standards Board

IRWM – Integrated Regional Water Management

JPA – Joint Powers Agreement

LAIF – Local Agency Investment Fund

LAFCO – Local Agency Formation Commission

LID – Low Impact Development

MCL – Maximum Containment Level

MGD – Million Gallons per Day

MGY – Million Gallons per Year

MOU – Memorandum of Understanding

O&M – Operations and Maintenance

PERS – Public Employees Retirement System

PHG – Public Health Goal

PPB – Parts Per Billion

PRV – Pressure Relief Valve

PVC Pipe – Polyvinyl Chloride Pipe

RWMF – Regional Water Management Foundation

RFP – Request for Proposals

ROW – Right-of-way

RWQCB – Regional Water Quality Control Board

SCWD – Santa Cruz Water Department (City of)

SDWA – Safe Drinking Water Act

SGMA – Sustainable Groundwater Management Act

SLVWD – San Lorenzo Valley Water District

SMGWA – Santa Margarita Groundwater Agency

SqCWD – Soquel Creek Water District

SWRCB – State Water Resources Control Board

TP – Treatment Plant

WY – Water Year



# SCOTTS VALLEY WATER DISTRICT

Board of Directors  
**Regular Meeting**  
**04/08/21 at 6:00 p.m.**  
**Agenda**

BOARD OF DIRECTORS  
PRESIDENT Bill Ekwall  
VICE PRESIDENT Ruth Stiles  
Wade Leishman  
Chris Perri  
Danny Reber

ASSOCIATE DIRECTORS  
Noelle Downing  
Annie Finch

GENERAL MANAGER  
Piret Harmon

This meeting is conducted in remote access format in compliance with Executive Order N-29-20.

Join the meeting remotely through the link: <https://zoom.us/j/91871975503>

Or by phone: 669 900 9128 Webinar ID: 918 7197 5503

The public has opportunities to make comments throughout the meeting.

To comment online, use the raise hand option, by phone press \*9.

If experiencing technological difficulties online, join the meeting via phone.

## 1. Convene

- 1.1. Call to Order and Roll Call
- 1.2. Pledge of Allegiance and Invocation
- 1.3. Closed Session Report (none)
- 1.4. Additions/Deletions to the Agenda
- 1.5. Oral Communications

## 2. Presentations

Pure Water Soquel  
Ron Duncan, General Manager and Melanie Mow Schumacher, Special Projects and Communications Manager, Soquel Creek Water District

## 3. Administrative

*Items are informational in nature and do not include an agenda report.*

- 3.1. [Approval of Minutes](#)  
Regular Board Meeting 03/11/21
- 3.2. [Committee and other Agency Meeting Reports](#)  
Engineering and Water Resources Committee 03/22/21  
Executive & Public Affairs Committee (none)  
Finance & Personnel Committee 03/17/21  
Interagency Committee 03/04/21  
Joint City–District Committee 03/15/21 – oral  
Santa Margarita Groundwater Agency (SMGWA) Board 03/25/21

**4. Consent**

*Items are routine in nature, may be approved by one motion, each item includes an agenda report.*

**4.1 Legal Services Agreement**

Recommendation: Authorize the General Manager to execute an agreement with the Law Offices of Robert E. Bosso in the amount of \$42,000 per year for legal services.

**4.2. Water Supply Outlook 2021**

Recommendation: Receive information and proclaim May 2021 as Water Awareness Month.

**5. Public Hearings (none)**

**6. Business**

*Items are complex in nature, considered individually, each item includes an agenda report with recommendation and an oral staff report or presentation.*

**6.1. Groundwater Report, Water Year 2020**

Presentation from Georgina King, Montgomery & Associates

Recommendation: Accept the Groundwater Management Plan Annual Report for Water Year 2020.

**6.2. Draft Annual Work Plan Fiscal Year 2022**

Recommendation: Receive and accept the FY 2022 Draft Work Plan.

**6.3. Capital and Maintenance Projects Budget Projection FY 2022-2026**

Recommendation: Receive information and provide input.

**6.4. Budget Assumptions FY 2022**

Recommendation: Receive information and provide input.

**6.5. Water Rate Study Update**

Recommendation: Receive information and provide input.

**6.6. Exploration of Possible Consolidation of Scotts Valley Water District and San Lorenzo Valley Water District**

Recommendation: Receive an update and provide input.

**7. Staff Reports**

7.1. Legal

District Counsel - oral

7.2. Administrative

General Manager - oral

7.3. Finance

Financial Reports 07/01/20 through 02/28/21

7.4. Operations

Operations Report - oral

Production, Demand and Rainfall Data (none)

Leak Adjustment Program Report 07/01/20 through 02/28/21

**8. Directors Reports**

Travel and Meetings

ACWA and ACWA/JPIA Updates

Other

**9. Written Correspondence**

ACWA Groundwater Committee Meeting Report 03/04/21 (Montgomery & Associates)

Letter of Support: SB 323 Local Government: water or sewer service: legal actions 03/19/20

**10. Community Relations**

Is Water District Merger a Good Move, Scotts Valley Times 03/01/21

March Newsletter

[SVWD News, Scotts Valley Senior Life Online Webinar on YouTube](#) 03/01/21

**11. Closed Session (none)**

**12. Report on Closed Session and Additional Items (none)**

**13. Future Items**

Think Twice, Water Use Efficiency Program

Rebate Program

Water Supply Outlook 2021

Proposed Budget Fiscal Year 2022

Urban Water Management Plan 2020  
AWIA Risk and Resilience Assessment  
Water Rate Study

**14. Meetings and Event Calendar**

Board Meetings

05/13/21

06/10/21

07/08/21

Committee Meetings

04/26/21 Executive & Public Affairs

04/28/21 Finance & Personnel

04/26/21 Engineering & Water Resources

06/03/21 Interagency

04/13/21 Joint City District

**Santa Margarita Groundwater Agency**

Board Meetings

04/22/21

05/27/21

06/24/21

**Association of California Water Agencies (ACWA) Events**

[2021 Virtual Spring Conference and Exhibition 05/12/21 – 05/13/21](#)

**15. Adjourn**

The next regular meeting of the Scotts Valley Board of Directors is scheduled for 05/13/21.

AVAILABILITY OF PUBLIC RECORDS PROVIDED TO THE BOARD OF DIRECTORS: THE DISTRICT WILL MAKE AVAILABLE FOR PUBLIC REVIEW ANY PUBLIC RECORDS FURNISHED TO THE BOARD OF DIRECTORS AT THE SAME TIME SUCH RECORDS ARE FURNISHED TO THE BOARD OF DIRECTORS. **SUCH RECORDS SHALL BE AVAILABLE AT [WWW.SVWD.ORG](http://www.svwd.org) AND AT THE DISTRICT OFFICE DURING NORMAL BUSINESS HOURS.**

PUBLIC ACCESS – ACCOMMODATIONS UNDER THE ADA: PURSUANT TO TITLE II OF THE AMERICANS WITH DISABILITIES ACT OF 1990, THE SCOTTS VALLEY WATER DISTRICT REQUESTS THAT ANY PERSON IN NEED OF ANY TYPE OF SPECIAL EQUIPMENT, ASSISTANCE OR ACCOMMODATION(S) IN ORDER TO EFFECTIVELY COMMUNICATE AT THE DISTRICT'S PUBLIC MEETING PLEASE MAKE SUCH A REQUEST TO THE DISTRICT OFFICE AT THE ABOVE ADDRESS OR BY CALLING (831) 438-2363 A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE SCHEDULED MEETING. ADVANCE NOTIFICATION WITHIN THIS GUIDELINE WILL ENABLE THE DISTRICT TO MAKE REASONABLE ARRANGEMENTS TO ENSURE ACCESSIBILITY.

Board of Directors  
**Regular Meeting**  
**03/11/21 at 6:00 p.m.**  
**Minutes**

**1. Convene**

1.1. Call to Order and Roll Call

President Ekwall called the meeting to order at 6:02 p.m. This meeting was conducted in a remote access format in compliance with Executive Order N-29-20.

Directors

Bill Ekwall  
Wade Leishman  
Chris Perri  
Danny Reber  
Ruth Stiles

Staff

Bob Bosso, Legal Counsel  
Piret Harmon, General Manager  
David McNair, Operations Manager  
Donna Paul, Assistant to General Manager

Associate Directors

Noelle Downing  
Annie Finch

Audience

6 guests

1.2. Pledge of Allegiance and Invocation

Associate Director Downing led the pledge of allegiance and Director Reber provided the invocation.

1.3. Closed Session Report (none)

1.4. Additions/Deletions to the Agenda

One guest provided public comment.

1.5. Oral Communications

One guest provided public comment.

**2. Presentation (none)**

**3. Administrative**

3.1. Approval of Minutes

02/11/21 Regular Board Meeting

MOTION carried to approve the minutes of the 02/11/21 Regular Board Meeting by unanimous roll call vote.

3.2. Committee and other Agency Meeting Reports

Engineering and Water Resources Committee 02/22/21

There was nothing further to add to the written report.

Executive & Public Affairs Committee 02/22/21

There was nothing further to add to the written report.

Finance & Personnel Committee 02/24/21

There was nothing further to add to the written report.

Interagency Committee 03/04/21

Director Leishman reported that it was his and several other members first meeting on this committee and that the integrated process for development and use of the infographic was discussed.

Joint City–District Committee 02/22/21

Director Stiles reported that the lack of recycled water being available when during future long term shut down of the inflow to the recycled water plant was discussed.

Santa Margarita Groundwater Agency (SMGWA) Board 02/25/21

In addition to the written report, Director Stiles and Director Perri provided comments.

One guest provided public comment.

**4. Consent (none)**

**5. Public Hearings (none)**

**6. Business**

**6.1. Water Supply Outlook 2021**

General Manager Harmon provided the staff report.

Information only, no action taken.

**6.2. Exploration of Possible Consolidation of Scotts Valley Water District (SVWD) and San Lorenzo Valley Water District (SLVWD)**

General Manager Harmon reported SLVWD Board discussed this item at its 03/04/21 meeting and rather than moving forward, directed the District Manager to work with the SVWD General Manager to prepare an outline level report of the benefits and drawbacks including cost savings and additional expense.

The Board briefly discussed the current situation, based on comments by Board members made at the 03/04/21 it appears that the SLVWD Board is not a willing

participant at this time.

No action was taken on this item. A status report will be provided at the April and May meetings.

6.3. Federal Tax Law Reimbursement Resolution

General Manager Harmon provided the staff report.

MOTION carried to adopt Resolution No. 02-21 declaring the District's intent to incur tax-exempt obligations to reimburse expenditures for the acquisition, construction and improvements of certain facilities of the District's infrastructure by unanimous roll call vote.

6.4. ACWA JPIA 2021 Executive Committee Election

MOTION carried to adopt Resolution No. 03-21 concurring in nomination of Melody A. McDonald to the Executive Committee of the ACWA JPIA.

**7. Staff Reports**

7.1. Legal

District Counsel Bosso reported on Supreme Court cases out of Stanislaus County and Antelope Valley and the Scottsborough settlement.

7.2. Administrative

General Manager – oral

The General Manager's report is appended.

7.3. Finance

Financial Reports 07/01/20 through 01/31/21

The financial reports were accepted without comment.

7.4. Operations

Operations Manager McNair reported on the Orchard Run Water Treatment Plan Project, AML project, flushing program, Well 10 motor and pump replacement.

Production, Demand and Rainfall Data through 02/28/21

Leak Adjustment Program Report 07/01/20 through 01/31/21

**8. Directors Reports**

Director Perri reported that he attended an ACWA Groundwater Committee meeting on 03/04/21; has been selected as reporter for Region 5 on the Energy Committee; and attended the Future of Water presented by the Groundwater Resources Association on 02/23/21 and 02/24/21.

Director Leishman reported that he will be absent from the 04/08/21 meeting.

President Ekwall reported that he and Vice President Stiles will be mentors for Associate Director Finch and Associate Director Downing.

**9. Written Correspondence**

Santa Cruz County Water Resources Management Status Report for 2020

The written correspondence was accepted without comment.

**10. Community Relations**

Water 101: With Big Changes afoot countywide, everything you need to know about what's coming out of your tap, Santa Cruz Lookout, 02/28/21

Does More Housing Mean more Water Demand in County, Santa Cruz Local 02/25/21

Leap of faith: North County water district toe line of merger talks, Press Banner 02/18/21

Up the Orchard Run, SVWD Rebuilds Largest Treatment Plant, Press Banner 02/05/21

February Newsletter, Special Edition

February Newsletter

The community relations were accepted without comment.

**11. Closed Session (none)**

**12. Report on Closed Session and Additional Items (none)**

**13. Future Items**

Water Supply Outlook 2021

Initial Projects List and Priorities FY 2022

Groundwater Report WY 2020

2020 Urban Water Management Plan

AWIA Risk and Resilience Assessment

AWIA Emergency Response Plan

Water Rate Study and Prop 218 Hearing

**14. Meetings and Event Calendar**

Board Meetings

04/08/21

05/13/21

06/10/21

Committee Meetings

03/22/21 Executive & Public Affairs  
03/24/21 Finance & Personnel  
03/22/21 Engineering & Water Resources  
06/03/21 Interagency  
03/15/21 Joint City District

**Santa Margarita Groundwater Agency**

Board Meetings

03/25/21  
04/22/21  
05/27/21

**Association of California Water Agencies (ACWA) Events**

[2021 Virtual Spring Conference and Exhibition 05/12/21 – 05/13/21](#)

**15. Adjourn**

The meeting adjourned at 7:39 p.m.

Approved:

Attest:

---

Bill Ekwall,  
Board President

---

Piret Harmon  
General Manager

**STAFF REPORT – General Items**

Scotts Valley Water District

**Date:** March 11, 2021

**To:** Board of Directors

**From:** General Manager

1. We received a notice from ACWA JPIA that they chose SVWD as one of the recipients for the Risk Control Grant in 2020. The awarded amount of \$10,000 was granted for the purchase of the hydro excavator.
2. I attended ACWA Legislative Symposium today. Two main topics discussed were water affordability legislation and climate resilience bonds.
3. 2021-2022 Legislative Session has two high priority bills for the water community: SB 222 and SB 223 by Senator Bill Dodd. SB 222 would create a water affordability program for low-income Californians. SB 223 would revise SB 998 to place new statutory requirements on residential water service disconnections due to nonpayment – including the proposed forgiveness of ratepayer debt. ACWA has taken an oppose-unless-amended position on both bills. ACWA believes a water and wastewater low-income rate assistance program, designed in a reasonable, efficient and effective manner and funded with a progressive funding source, is the right approach.
4. The Legislature has also reintroduced several proposals for the upcoming session that focus on mitigating the impacts of climate change, including the impact to California's water supply reliability. These bills propose significant new funding for water specific issues as well as host of other climate management related initiatives. The 4<sup>th</sup> California Climate Change Assessment estimates that climate change costs could rise to around \$113B annually by 2050 if mitigation steps are not taken. FEMA estimates that for every \$1 spent on pre disaster resilience, \$6 are saved in damage and reconstruction costs. Despite increased public health and economic concerns related to Covid-19, a \$6B bond measure is favored by 20 points.



# SCOTTS VALLEY WATER DISTRICT

svwd.org  svwater

## Engineering and Water Resources Committee

03/22/21 4:00 p.m.

### Meeting Report

#### 1. Convene

The meeting convened at 4:00 p.m. and was conducted in remote access format in compliance with Executive Order N-29-20.

#### Present

Members: Community Member Krotcov, Director Leishman, Director Perri.

Staff: General Manager Harmon, Finance and Customer Service Manager Kurns, Operation Manager McNair, Water Use Efficiency Coordinator Ravinale and Administrative Office Assistant Wallace.

Guests: One guest.

#### 2. Discussion Items

##### 2.1. Leak Adjustment Program Report 07/01/20 through 02/28/21

The committee reviewed and discussed the Leak Adjustment Program Report.

##### 2.2. Urban Water Management Plan 2020: Demand Projections

The Committee received and discussed the draft water demand projections for the 2020 Urban Water Management Plan and requested additional clarification to differentiate between the cumulative demand within the City of Scotts Valley versus demand exclusively within the District.

##### 2.3. Proposed Projects Budget FY 2022-2026

The Committee received and discussed the proposed Projects Budget Projections FY2022 through FY 2026.

##### 2.4. Groundwater Report WY 2020

General Manager Harmon presented the annual groundwater report for water year 2020 and noted that future groundwater reports will fall under the responsibility of the Santa Margarita Groundwater Agency.

#### 3. Oral Communications

None.

#### 4. Future Agenda Items

AWIA Risk and Resilience Assessment  
Urban Water Management Plan 2020

#### 5. Adjourn

The meeting adjourned at 5:04 p.m.



# SCOTTS VALLEY WATER DISTRICT

svwd.org  svwater

## Finance and Personnel Committee

03/17/21 4:00 p.m.

### Meeting Report

1. Convene

The meeting convened at 4:00 p.m. and was conducted in remote access format in compliance with Executive Order N-29-20.

Present

Members: Community Member Callahan, Director Ekwall and Director Reber.

Staff: General Manager Harmon, Finance and Customer Service Manager Kurns and Administrative Office Assistant Wallace.

Guests: Sanjay Gaur, Raftelis Financial Consultants, Director Stiles (observer).

2. Discussion Items

2.1. Multi-Year Water Rate Study Presentation

Sanjay Gaur presented an overview of California rate study requirements, the status of the District's 2021 rate study and the general planning decisions affecting the study, and responded to questions. The committee agreed with the proposed policy goals for the relationship between recycled and potable funds and recommended that the full Board review the rate increase scenarios. They also requested additional information regarding alternative billing practices.

2.2. FY 2022 Budget Assumptions

Finance Manager Kurns provided an overview of District financial conditions and assumptions used to prepare the FY 2022 budget. The committee discussed the budget assumptions and directed staff to provide this information to the full Board.

2.3. Financial Reports 07/01/20 through 02/28/21

The Committee reviewed and discussed financial reports.

3. Oral Communications

None.

4. Future Agenda Items

FY 2022 Proposed Budget

Water Rate Study

Identity Theft Prevention Program

5. Adjourn

The meeting adjourned at 5:24 p.m.



**Interagency Committee**  
**03/04/21 at 4:00 p.m.**  
**Agenda**

1. Convene

The meeting convened at 4:02 p.m. It was conducted in remote access format in compliance with Executive Order N-29-20.

Present:

Scotts Valley Water District

Wade Leishman

Piret Harmon (staff)

City of Scotts Valley

Derek Timm

Taylor Bateman (staff)

Scotts Valley Fire Protection District

Ron Whittle (staff)

Scotts Valley Unified School District

Michael Shulman

Sue Rains (Alternate)

Tanya Krause (staff)

2. Meeting Report 12/03/20

The meeting report was accepted without comments.

3. Integrated Process for Development: Increased or Improved Visibility

The committee discussed ways to improve visibility of the infographic. Staff will email the infographic to all committee members and staff.

4. Agency Updates

City of Scotts Valley

Mayor Timm and Community Development Director Bateman provided the City update that included information on recreation, revenues, library renovations, general plan update, ADU standards update and development activities.

Scotts Valley Fire Protection District

Chief Whittle provided the Fire District update that included information on call volume and staff promotions.

Scotts Valley Water District

General Manager Harmon and Director Leishman provided the Water District update that included information on water supply conditions, turf rebates, i-meter program, WaterSmart, water rate study and the potential consolidation of SVWD and SLVWD.

Scotts Valley Unified School District

Superintendent Krause and Director Schulman provided the School District update that included information on the youngest students returning to the classroom and preparations to reopen for additional students.

5. Topics for Future Meetings

None.

6. Adjourn

The meeting adjourned at 5:25 p.m.

## Board Meeting Recap: Mar 2021

### **SMGWA Board aims to complete draft of GSP for review in July**

Santa Margarita Groundwater Agency's March board meeting was held Thursday, March 25, and was conducted via all-remote, web- and phone-based access due to the coronavirus prevention guidelines. The Board is working to develop the state-mandated Groundwater Sustainability Plan (GSP), aiming to complete a draft for review at the July 29, 2021, board meeting. In March, Technical Consultant Georgina King from Montgomery & Associates presented an overview of the GSP sections with their respective statuses. The GSP is due to Department of Water Resources in early 2022.

King explained definitions of measurable objectives and undesirable results and their relationship with the rest of the elements in the suite of sustainable management criteria.

The Board discussed the proposed approach for establishing measurable objectives and undesirable result for the individual aquifers in the Basin. Board members were interested in ensuring sufficient operational flexibility in case of an emergency and potential drought conditions. The Board was in support of the proposed measurable objective for groundwater levels based on the measured seasonal low level at the end of WY 2004 and agreed on specific verbiage for the undesirable results in the Santa Margarita aquifer.

The Board provided input for setting measurable objectives and undesirable results in the Monterey, Lompico and Butano aquifers and is expected to agree on the criteria at its next meeting.

SMGWA also will be enhancing its monitoring network through the installation of additional monitoring wells. This will help the agency address data gaps in the basin. The addition of the wells, including design and construction, is funded largely by a GSP grant and a request for proposals has been issued.

The next SMGWA Board of Directors meeting will be held Thursday, April 22, at 5:30 p.m. More information at [www.smgwa.org](http://www.smgwa.org).



**SCOTTS VALLEY**  
WATER DISTRICT

## **AGENDA REPORT**

Scotts Valley Water District

**Date:** 04/08/21

**To:** Board of Directors

**Item:** Consent 4.1

**Subject:** **Legal Services Agreement**

**Reason:** Mandated by Board of Directors Best Practices, Section 5. Role of the General Manager, Staff and Legal Counsel

### **SUMMARY**

**Recommendation:** Authorize the General Manager to execute an agreement with the Law Office of Robert E. Bosso in the amount of \$42,000 per year for legal services.

**Fiscal Impact:** The total amount of the contract is \$42,000 per year. Funds are available in the proposed FY 2022 Operating Budget.

**Previous Related Action:** On 06/11/15 the Board approved the current Legal Services Agreement and it was subsequently amended 05/08/18 to reflect the change in ownership and name of the firm.

### **BACKGROUND**

Bosso Williams began providing legal services to Scotts Valley Water District in March 2007 in connection with the acquisition of the site for Well 10A, becoming General Counsel shortly thereafter.

### **DISCUSSION**

The retainer fee for legal services was established at \$3,000 per month effective July 2015. The proposal is to raise the monthly retainer to \$3,500, which represents about 3% per year adjustment since 2015. The proposed fee is fixed for a 3-year term. Any costs reimbursable to District will be billed separately at a rate of 250 per hour.

Submitted,

Piret Harmon

General Manager

Enclosed: Professional Services Agreement Legal Counsel Services



# SCOTTS VALLEY WATER DISTRICT

svwd.org  svwater

## PROFESSIONAL SERVICES AGREEMENT FOR LEGAL COUNSEL SERVICES

This Professional Services Agreement ("Agreement") is made and entered into on the \_\_\_\_ day of \_\_\_\_\_ 2021 by and between the SCOTTS VALLEY WATER DISTRICT, a county water district ("District") and THE LAW OFFICE OF ROBERT E. BOSSO, a sole proprietor ("Attorney").

### RECITALS

The District has a need for professional services described in Exhibit A and the Attorney is specially trained, experienced and competent to perform and has agreed to provide such services.

Now, therefore, in consideration of the mutual promises, covenants, terms and conditions hereinafter contained, the parties hereby agree as follows:

### AGREEMENT

#### 1) Scope of Services.

- a) The Attorney shall furnish to the District upon execution of this Agreement or receipt of the District's written authorization to proceed, those services and work set forth in Exhibit A ("Scope of Services") which is attached hereto and, by this reference, made a part hereof.
- b) The Attorney shall provide services and work under this Agreement consistent with the requirements and standards established by applicable federal, state and county laws, ordinances, regulations and resolutions. The Attorney represents and warrants that it will perform its work in accordance with generally accepted industry standards and practices for the work required under this agreement that are in effect at the time of performance of this Agreement.

#### 2) Term; Schedule; Termination.

- a) The term of this Agreement shall be as stated in Exhibit B ("Schedule").
- b) The District may, by written notice to the Attorney, terminate the whole or any part of this Agreement, if, in the judgment of the District that the Attorney has materially breached this Agreement, failed to timely provide and/or satisfactorily perform any task, deliverable, service, or other work required either under this Agreement or failed to demonstrate a high probability of timely fulfillment of performance requirements under this Agreement, or of any obligations of this Agreement, and in either case, fails to demonstrate convincing progress toward a cure within five (5) working days (or such

longer period as the District may authorize in writing) after receipt of written notice from the District specifying such failure. At the option of the District, this Agreement may terminate on the occurrence of (a) bankruptcy or insolvency of Attorney, or (b) the sale or transfer of Attorney's business.

- c) Either party may terminate this agreement, without cause, by providing thirty (30) days written notice of termination to the other party. Said notice of termination shall be deemed to commence on receipt. Attorney agrees that if the District requests, irrespective of which party terminates, to assist in the selection of a new attorney.

### **3) Compensation.**

- a) The Attorney shall be compensated for work performed as set forth in Exhibit C ("Payment Terms"). The Attorney shall provide the District with a monthly statement, of fees earned and costs incurred for services provided. The statement shall generally describe the services performed, and a reasonable itemization of costs.
- b) The Attorney shall provide the District with copies of the certified payroll records (CPRs) along with the period statements if the services under this Agreement are being performed as part of an applicable public works or maintenance project, as defined by the Prevailing Wage Laws.
- c) The Attorney is not entitled to reimbursable expenses other than stated in Exhibit C.
- d) Payment by the District shall be conditioned upon and subject to the Attorney's satisfactory completion of work or appropriate phases or tasks as described in the attached Scope of Work.
- e) Except as expressly provided in this Agreement, the Attorney shall not be entitled to nor receive from the District any additional consideration, compensation, salary, wages or other type of remuneration for services rendered under this Agreement.
- f) The Attorney shall provide the District with a W-9 form. The District shall not withhold any Federal or State income taxes or Social Security tax from any payments made by the District to the Attorney under the terms and conditions of this Agreement. Payment of all taxes and other assessments on such sums is the sole responsibility of the Attorney.

- 4) **Ownership of Work Product.** All documents, drawings and work product ("Work") prepared or produced by the Attorney under this Agreement shall become and remain the property of the District, except as otherwise approved in writing by the District. The Attorney shall retain intellectual property rights in the Work, except Attorney shall grant the District a nonexclusive license in all Work protected by intellectual property rights, and District may reproduce the plans, prepare derivative works based on the Work, and build improvements depicted in or relating to the Work. The District shall indemnify the Attorney for any claims or damages arising from the District's negligence in modifying the Work.

- 5) **Prevailing Wages, DIR Registration.** The Attorney shall abide by all applicable prevailing wage laws as set forth in Labor Code Section 1720 and 1770 et seq. If the services under this Agreement, or any portion thereof, are being performed as part of an applicable public works or maintenance project, as defined by the Prevailing Wage Laws, the Attorney agrees to fully comply, and to require its sub Attorneys to comply with such laws. It shall be the Attorney's sole responsibility to comply with all applicable registration and labor compliance requirements.
- 6) **Required Licenses, Certificates and Permits.** Any licenses, certificates or permits required by the federal, state, county or municipal governments for the Attorney to provide the services and work described in Exhibit A must be procured by the Attorney and be valid at the time the Attorney enters into this Agreement. Further, during the term of this Agreement, the Attorney must maintain such licenses, certificates and permits in full force and effect. Licenses, certificates and permits may include but are not limited to driver's licenses, professional licenses or certificates and business licenses. Such licenses, certificates and permits shall be procured and maintained in force by the Attorney at no expense to the District
- 7) **Office Space, Supplies, Equipment, etc.** Unless otherwise provided in this Agreement, the Attorney shall provide such office space, supplies, equipment, vehicles, reference materials and telephone service as is necessary for Attorney to provide the services under this Agreement.
- 8) **Insurance.** The Attorney shall take out, and maintain during the life of this Agreement, insurance policies with coverage at least as broad as follows:
  - a) **General Liability Insurance.** Commercial general liability insurance covering bodily injury, personal injury, property damage, products and completed operations with limits of no less than One Million Dollars (\$1,000,000) per incident or occurrence.
  - b) **Professional Liability Insurance.** Professional errors and omissions liability insurance with limits of no less than One Million Dollars (\$1,000,000) aggregate. Such professional liability insurance shall be continued for a period of no less than one year following completion of the Attorney's work under this Agreement.
  - c) **Automobile Liability Insurance.** If the Attorney or Attorney's officers, employees, agents or representatives utilize a motor vehicle in performing any of the work or services under this Agreement, owned/non-owned automobile liability insurance providing combined single limits covering bodily injury and property damage liability with limits of no less than One Million Dollars (\$500,000) per incident or occurrence.
  - d) **Workers' Compensation Insurance.** Workers' Compensation insurance as required by the California Labor Code.
  - e) **Deductibles.** Any deductibles or self-insured retentions over \$10,000 must be declared in writing and approved by the District. At the option of the District, either: (a) the insurer shall reduce or eliminate such deductibles or self-insured retentions, or (b) Attor-

ney shall provide a bond, cash, letter of credit, guaranty or other security satisfactory to the District guaranteeing payment of the self-insured retention or deductible and payment of any and all costs, losses, related investigations, claim administration and defense expenses. The District, in its sole discretion, may waive the requirement to reduce or eliminate deductibles or self-insured retentions, in which case, the Attorney agrees that it shall be responsible for and pay any self-insured retention or deductible and shall pay any and all costs, losses, related investigations, claim administration and defense expenses related to or arising out of Attorney's defense and indemnification obligations as set forth in this Agreement.

- f) Attorney's Insurance is Primary. The Attorney's insurance coverage shall be primary insurance regarding the District and the District's officers, officials and employees. Any insurance or self-insurance maintained by the District or the District's officers, officials and employees shall be excess of the Attorney's insurance and shall not contribute to the Attorney's insurance.
  - g) Approved Insurers. Insurance shall be placed with California admitted insurers (licensed to do business in California) with a current rating by Best's Key Rating Guide of no less than A:VII; except as otherwise approved by the District.
  - h) Subcontractors. The Attorney shall require that all of its subcontractors are subject to the insurance and indemnity requirements stated herein or shall include all subcontractors as additional insureds under its insurance policies.
  - i) Certificates of Insurance. Prior to the date the Attorney begins performance of its obligations under this Agreement, the Attorney shall furnish the District with certificates of insurance showing coverage required by this Agreement.
- 9) **Defense and Indemnification.** The Attorney shall exonerate, indemnify, defend, and hold harmless the District and the Funding Agency, and their officers, agents, employees and volunteers from and against all damages, liability, losses, claims, suits, or actions of any kind and nature whatsoever, including attorneys' fees, arising directly or indirectly from the Attorney's negligence, errors, omissions or willful misconduct in performance of this Agreement
- 10) **Status of Attorney.** All acts of the Attorney and its officers, employees, agents, representatives, subcontractors and all others acting on behalf of the Attorney relating to the performance of this Agreement shall be performed as independent contractors and not as agents, officers or employees of the District. The Attorney, by virtue of this Agreement, has no authority to bind or incur any obligation on behalf of the District. If the Attorney deems it appropriate to employ a subconsultant, expert or investigator in connection with the performance of the services under this Agreement, the Attorney shall so advise the District and seek the District's prior approval. Any Attorney, expert or investigator employed by the Attorney at the Attorney's expense and shall be the agent of the Attorney and not the District.

- 11) **Records and Audit.** The Attorney shall prepare and maintain all writings, documents and records prepared or compiled in connection with the performance of this Agreement for at least four (4) years. Any authorized representative of the District shall have access to any writings as defined above for the purposes of making audit, evaluation, examination, excerpts and transcripts during the period such records are to be maintained by the Attorney.
- 12) **Assignment.** This is an agreement for the services of the Attorney. The District has relied upon the skills, knowledge, experience and training of the Attorney and Attorney's firm, associates and employees as an inducement to enter into this Agreement. The Attorney shall not assign or subcontract this Agreement without the express written consent of the District.
- 13) **Waiver of Default.** Waiver of any default by either party to this Agreement shall not be deemed to be waiver of any subsequent default. Waiver or breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach and shall not be construed to be a modification of the terms of this Agreement unless this Agreement is modified as provided below.
- 14) **Severability.** If any portion of this Agreement or application thereof to any person or circumstance shall be declared invalid by a court of competent jurisdiction or if it is found in contravention of any federal, state or county statute, ordinance or regulation the remaining provisions of this Agreement or the application thereof shall not be invalidated thereby and shall remain in full force and effect.
- 15) **Amendment.** This Agreement may be modified, amended by the mutual consent of the parties hereto if such amendment or change is in written form and executed with the same formalities as this Agreement and attached to the original Agreement to maintain continuity.
- 16) **Entire Agreement.** This Agreement supersedes any and all other agreements, either oral or in writing, between any of the parties herein with respect to the subject matter hereof and contains all the agreements between the parties with respect to such matter.
- 17) **Construction.** Headings or captions to the provisions of this Agreement are solely for the convenience of the parties, are not part of this Agreement, and shall not be used to interpret or determine the validity of this Agreement. Any ambiguity in this Agreement shall not be construed against the drafter, but rather the terms and provisions hereof shall be given a reasonable interpretation as if both parties had in fact drafted this Agreement.
- 18) **Governing Law and Venue.** This Agreement shall be deemed to be made under and shall be governed by and construed in accordance with, the laws of the State of California. Any action brought to enforce the terms or provisions of this Agreement shall have venue in Santa Cruz County.

**19) Counterparts.** All counterparts shall be construed together and shall constitute one agreement. A signature reproduced electronically, by facsimile or .pdf shall be treated as an original signature.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first written above. This Agreement may be executed in one or more counterparts by the parties hereto.

ATTORNEY

DISTRICT

By: \_\_\_\_\_

By: \_\_\_\_\_

Robert E. Bosso  
The Law Office of Robert E. Bosso  
133 Mission Street, Suite 240  
Santa Cruz, CA 95060  
rbosso@bossolaw.com

Piret Harmon, General Manager  
Scotts Valley Water District  
2 Civic Center Drive  
Scotts Valley, CA 95066  
pharmon@svwd.org

## **EXHIBIT A**

### **Scope of Services**

The Attorney services include providing legal guidance to the staff and board (including, but not limited to, providing updates on changes in legal requirements), representing the District in litigation matters, attending Board meetings and other events as requested by the District Board of Directors or the General Manager, and communicating on behalf of the District, as directed, with outside parties including, but not limited to, auditors, and other third parties.

## **EXHIBIT B**

### **Schedule**

This Agreement covers services provided in the time period of July 1, 2021 through June 30, 2024.

## **EXHIBIT C**

### **Payment Terms**

District shall pay the Attorney a monthly retainer of \$3,500, in arrears, which covers all general non-litigation matters, legal support services including telephone conferences, e-mails, letters, meetings, and project related legal transactions (e.g. contracts, easements, etc.). Litigation matters, which includes matters in which litigation is filed for or against the District, formal mediation and arbitration matters shall be billed separately at \$250 per hour.

For out-of-town travel (more than 10 miles from Attorney's office), District shall pay Attorney's mileage expenses according to the IRS reimbursement rate and travel time in excess of 0.5 hours at 50% of the hourly litigation rate.

## **AGENDA REPORT**

Scotts Valley Water District

**Date:** 04/08/21  
**To:** Board of Directors  
**Item:** Consent 4.2  
**Subject:** **Water Supply Outlook 2021**  
**Reason:** Supports District Mission

### **SUMMARY**

**Recommendation:** Receive information and proclaim May as Water Awareness Month

**Fiscal Impact:** No direct impact from this action

**Previous Related Action:** On 05/14/20 the Board established Stage 2 Water Supply Conditions for Water Year 2020 and on 04/12/18 Stage 1 Water Supply Conditions for Water Year 2018.

### **BACKGROUND**

The District's Water Shortage Contingency Plan (WSCP) is included in its 2015 Urban Water Management Plan. The Water Shortage Contingency Plan stipulates a four-stage demand reduction plan with the amount of rainfall in a given year or series of years being the basis for defining the stages of action. In addition to the precipitation-based triggers, the plan suggests groundwater level adjustment to the triggers. Demand reduction stages may be adjusted up or down based on this evaluation.

The Scotts Valley area, similarly to the rest of the State of California, experienced an extended period of drought in 2012 through 2015 when the cumulative rainfall reached 67% of the average. While WY 2019 received about average precipitations (104%), WY 2020 delivered only 50%.

### **DISCUSSION**

Last decade has been experiencing very volatile precipitation patterns. WY 2020 started off with the first 3 months of the water year showing the signs of a normal rainfall year with 30% of average precipitations at the end of December but the trend changed drastically at the beginning of 2020. The current water year has been quite opposite – the total rainfall amount for the for the first 3 months was 3.88 inches or about 9% of the average. The conditions reversed in January with the entire West Coast seeing heavy rain and snow, that resulted in 12.42 inches measured as of 1/31/21. February and March remained significantly below long-term averages for these months, contributing only 1.39 inches and 2.81 inches respectively. The total cumulative of 16.63 is only 44% of normal at this point in the year and indicates a Stage 3 of the demand reduction plan. 21 inches total rainfall for the water year would transition us from Stage 3 to Stage 2 and 37 inches are

required to reach Stage 1. Respective demand reduction targets are presented in the following table. As a reference, WY 2018 potable system demand was 1,130 acre feet (AF), WY 2019 1,109 AF and WY 1,135 AF.

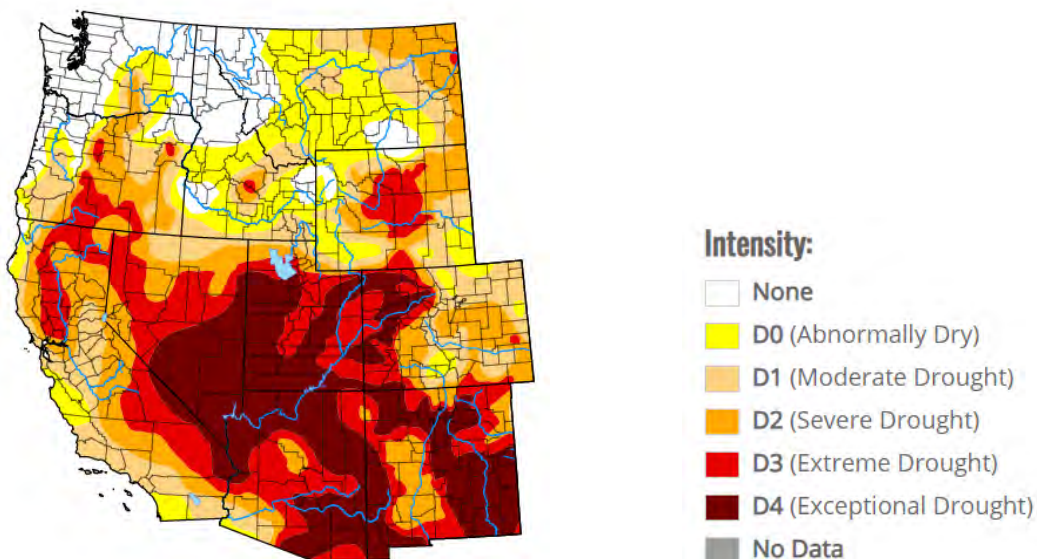
WATER SUPPLY CONDITION - AS OF MARCH 31, 2021													
		Average Rainfall	Rainfall (inches)				Rainfall (percent of average)				Cumulative		Single Year
			2018	2019	2020	2021	2018	2019	2020	2021	3-year	2-year	
Stage 1	Cumulative rainfall over 2 years < 80% of average and/or Single year rainfall < 75% of average	41.63	24.26	43.72	20.9	16.63	58%	105%	50%	40%		45%	40%
Stage 2	Cumulative rainfall over 2 years < 70% of average and/or Single year rainfall < 60% of average	41.63	24.26	43.72	20.9	16.63	58%	105%	50%	40%	65%	45%	40%
Stage 3	Cumulative rainfall over 3 years < 50% of average and/or Single year rainfall < 50% of average	41.63	24.26	43.72	20.9	16.63	58%	105%	50%	40%	65%	45%	40%
Stage 4	precipitation with groundwater levels below historic low range	41.63	24.26	43.72	20.9	16.63	58%	105%	50%	40%	65%		

### DEMAND REDUCTION CALCULATION

System demand reduction is based on a baseline of average demand from the last 5 years where precipitation was >80% of average

			Target (AF)
Stage 1	Demand reduction	10%	1068
Stage 2	Demand reduction	15%	1009
Stage 3	Demand reduction	20%	950
Stage 4	Demand reduction	25%	890

While the local water supply conditions are less than promising, the larger picture is even grimmer. According to the [US Drought Monitor](#), nearly 40% of the West is currently in a state of extreme or exceptional drought, and barely 10% of the region is altogether drought-free.



As California experiences a second consecutive dry year, the Department of Water Resources (DWR) announced at the end of March an adjustment to its initial State Water Project allocation for the 2021 water year. DWR now expects to deliver 5% of requested supplies this year, down from the initial allocation of 10% announced in December. Initial allocations are based on conservative assumptions regarding hydrology and factors such as reservoir storage. Following a below average 2020 water year, California's major reservoirs are at 50% of capacity.

2020 Annual Groundwater Report, which is presented to the board at this meeting as a separate agenda item, presents the groundwater level data as of 09/30/20. According to the Water Shortage Contingency Plan, the spring groundwater levels are collected and evaluated relative to historic lows between 2003 and 2013. Demand reduction stages may be adjusted up or down based on this evaluation. This work will occur in April and outcome be presented at the next meeting. Staff recommends that the Board decides on the course of action for the remainder of the year either at its May meeting.

To increase the awareness around dry water supply conditions and encourage customers to be mindful of their water consumption throughout the remainder of the water year, staff is bringing forward a proclamation to announce that May is "Water Awareness Month."

Submitted,

Piret Harmon  
General Manager

Enclosed: May as a Water Awareness Month Proclamation

Scotts Valley Water District  
Board of Directors

Proclamation

WHEREAS:

1. Water is basic and essential to life, and vital to our region's people, animals, ecosystems and economy;
2. Santa Cruz County relies entirely on local rainfall for its water supply, making this resource limited and precious;
3. Scotts Valley Water District relies on groundwater from the Santa Margarita Groundwater Basin as its only source of drinking water and supplements its potable water by distributing recycled water to its large irrigation customers;
4. Scotts Valley Water District, along with the entire State is now experiencing its second consecutive dry winter, with most of the State currently in drought conditions;
5. May is an important time to become more aware of and carefully use the water resources, especially as warmer weather and the irrigation season arrives;
6. Scotts Valley Water District offers many water use efficiency resources to its customers such as free water-saving devices, the WaterSmart leak detection service, numerous rebates, water efficiency consultations, and information about saving water at home and work.

NOW, THEREFORE BE IT RESOLVED:

Scotts Valley Water District Board of Directors hereby proclaims May 2021 as Water Awareness Month and urges all customers of the Scotts Valley Water District to join with other water organizations throughout the Santa Margarita Groundwater Basin, the Central Coast and the State of California to prevent water waste and use water efficiently.

ADOPTED this 8th day of April 2021,

---

Bill Ekwall, President  
Board of Directors

## **AGENDA REPORT**

Scotts Valley Water District

**Date:** 04/08/21

**To:** Board of Directors

**Item:** Business 6.1

**Subject:** **Groundwater Report, Water Year (WY) 2020**

**Reason:** Supports SVWD's Groundwater Management Plan adopted in 1994 (AB3030)

### **SUMMARY**

**Recommendation:** Accept the Groundwater Management Plan Annual Report for Water Year 2020.

**Fiscal Impact:** None.

**Previous Related Action:** On 03/12/20 the Board accepted the Groundwater Management Plan Annual Report, Water Year 2019.

On 03/22/21 the Engineering and Water Resources Committee received a summary overview of the 2020 Annual Groundwater Report.

### **BACKGROUND**

The purpose of the annual groundwater report is to provide a management-level summary of groundwater-related activities and issues that occurred in the District during the year. Each year the report is presented to the Board, distributed to local agencies and made available to the public at the District office and on the website.

The District has been producing the annual groundwater reports since 1994. The format of the report has changed over time to meet the evolving needs of the District. The odd year reports are concise summaries focused on District operations whereas the even year reports provide a more regional assessment.

### **DISCUSSION**

Rainfall in Water Year (WY) 2020 was 20.3 inches, which is 50% of average rainfall. Cumulative rainfall deficit over past 14-year period (Oct 2007 – Sep 2020) is 4.7 inches below average – indication that climate over that period is drier than the historical.

Groundwater pumped by SVWD in WY2020 was 1,215 acre-feet, which is similar to the previous three years' pumping. Current pumping is 885 acre-feet less than the historical maximum pump-

ing from 1997. In WY2020, approximately 64% of SVWD's groundwater production was from the Lompico aquifer and 36% was from the Butano aquifer.

The District maintains a number of ongoing activities to support the sustainable management of the groundwater resource including water use efficiency, a recycled water program, and water audit and loss control program. In WY2020, recycled water deliveries were approximately 178 acre-feet. Since WY2002, approximately 2,670 acre-feet of recycled water has been delivered for use. Cumulative recycled water deliveries equate to banking more than twice the volume of groundwater that was pumped by the District in WY2020.

Groundwater elevations in all aquifers have generally experienced recovery since 2010, with this trend continuing through WY2020. Groundwater levels in the Santa Margarita and Butano aquifers in WY2020 remain consistent with previous years, including the typical seasonal and climactic fluctuations. Groundwater levels in both the Monterey formation and Lompico aquifer increased slightly in WY2020, continuing a trend of recovery that began around WY2015. Specifically, Lompico aquifer groundwater levels have increased up to 40 feet over the past four years. Despite increases in groundwater elevations shown in most hydrographs, there was a model-estimated loss of groundwater in storage during WY2020 of 890 acre-feet. This loss comes after last year's storage increase of 1,650 acre-feet. This results in a net increase in groundwater in storage of 760 acre-feet over the past two years.

Submitted,

Piret Harmon

General Manager

Enclosed: Groundwater Report, Water Year 2020



**MONTGOMERY  
& ASSOCIATES**

Water Resource Consultants

March 31, 2021

# Groundwater Management Plan Annual Report - Water Year 2020

Prepared for:



SCOTTS VALLEY  
WATER DISTRICT

1970 Broadway, Suite 225, Oakland, CA 94612  
[elmontgomery.com](http://elmontgomery.com)

March 31, 2021

# Groundwater Management Plan Annual Report - Water Year 2020 Scotts Valley Water District

*Prepared for:*

Scotts Valley Water District  
Santa Cruz County, California

*Prepared by:*

Montgomery & Associates  
1970 Broadway, Oakland, California

## Contents

---

<b>1</b>	<b>EXECUTIVE SUMMARY</b> .....	<b>1</b>
<b>2</b>	<b>INTRODUCTION</b> .....	<b>3</b>
2.1	District Overview.....	3
2.2	Groundwater Management Goals and Objectives .....	3
2.3	Annual Report Format.....	6
2.4	Santa Margarita Groundwater Basin.....	6
2.5	Groundwater Management Areas.....	11
2.6	Historical Groundwater Issues .....	13
<b>3</b>	<b>WATER SUPPLY SUMMARY</b> .....	<b>14</b>
3.1	Precipitation Summary.....	14
3.2	SVWD Water Supply .....	16
3.2.1	Groundwater Pumping.....	16
3.2.2	Recycled Water Deliveries .....	21
3.2.3	Seasonality of Groundwater Pumping .....	23
3.3	Regional Groundwater Pumping .....	25
3.4	SVWD Production Wells.....	29
3.4.1	Condition of Production Wells .....	29
3.4.2	Groundwater Pumping by Well.....	31
3.4.3	Groundwater Levels in Production Wells.....	31
<b>4</b>	<b>GROUNDWATER QUALITY ASSESSMENT</b> .....	<b>33</b>
4.1	SVWD Groundwater Quality and Treatment .....	33
4.1.1	Groundwater Quality.....	33
4.1.2	Groundwater Treatment.....	35
4.2	Environmental Compliance Sites .....	35
4.2.1	Watkins-Johnson Superfund Site.....	36
4.2.2	Scotts Valley Dry Cleaners.....	38
4.2.3	Kings Dry Cleaners .....	38
4.2.4	Inactive Sites .....	39
4.3	Recycled Water Program .....	39
<b>5</b>	<b>GROUNDWATER CONDITIONS</b> .....	<b>41</b>
5.1	Aquifer Conditions.....	41
5.1.1	Santa Margarita Aquifer.....	41
5.1.2	Monterey Formation.....	44
5.1.3	Lompico Aquifer .....	47

---

5.1.4	Butano Aquifer .....	51
5.2	Aquifer Storage Analysis.....	55
<b>6</b>	<b>GROUNDWATER MANAGEMENT PROGRAMS.....</b>	<b>58</b>
6.1	Groundwater Augmentation Projects .....	58
6.1.1	Water Use Efficiency Program .....	58
6.1.2	Recycled Water Program .....	59
6.1.3	Regional Intertie Project .....	60
6.1.4	Regional Water Supply MOA .....	60
6.1.5	Santa Margarita Groundwater Basin ASR Project .....	61
6.1.6	Low Impact Development Projects.....	61
6.1.7	Purified Recycled Water Recharge Project .....	64
6.2	Groundwater Management Activities.....	64
6.2.1	Sustainable Groundwater Management .....	64
6.2.2	Santa Margarita Basin Groundwater Model .....	64
6.3	Groundwater Management Monitoring Program.....	65
6.3.1	SVWD Data Collection.....	65
6.3.2	CASGEM Program.....	67
6.4	Stakeholder Outreach .....	67
<b>7</b>	<b>REFERENCES CITED .....</b>	<b>69</b>

## Tables

Table 1.	WY2010 to WY2020 SVWD Groundwater Pumping by Aquifer and Recycled Water Usage .....	18
Table 2.	WY2011 to WY2020 SVWD Groundwater Pumping and Recycled Water Usage.....	23
Table 3.	Summary of WY2020 Private Groundwater Pumping in the GWRA and SMGB .....	26
Table 4.	WY2011 to WY2020 Groundwater Pumped in the GWRA by Aquifer .....	29
Table 5.	Summary of Well Completion Data for Currently Active SVWD Production Wells.....	30
Table 6.	WY2011 to WY2020 SVWD Groundwater Pumping by Well .....	31
Table 7.	WY2020 Summary of Key Water Quality Constituents in Raw Groundwater.....	34
Table 8.	Summary of Water Treatment Processes Applied by SVWD .....	35
Table 9.	Model-Simulated Change in Aquifer Storage for the GWRA by Aquifer.....	57
Table 10.	Unaccounted-for Water Estimates WY2017-WY2020.....	58
Table 11.	Volume Infiltrated at LID Facilities in SVWD Service Areas.....	61
Table 12.	Wells Used for the Groundwater Management Monitoring Program.....	66

## Figures

---

Figure 1. Scotts Valley Water District Service Area Map .....	5
Figure 2. Santa Margarita Groundwater Basin .....	8
Figure 3. Geologic Cross-Section through the Scotts Valley Area .....	9
Figure 4. Cross-Section and Well Locations.....	10
Figure 5. Groundwater Reporting and Management Areas .....	12
Figure 6. Annual Precipitation for Scotts Valley by Water Year.....	15
Figure 7. Annual SVWD Groundwater Pumping and Service Connections .....	17
Figure 8. SVWD Groundwater Pumping by Month for WY2020 .....	20
Figure 9. Annual and Cumulative Recycled Water Deliveries.....	22
Figure 10. SVWD Monthly Groundwater Pumping Comparison .....	24
Figure 11. Regional Groundwater Pumping by User Type in the GWRA .....	28
Figure 12. Locations of Environmental Compliance Sites .....	37
Figure 13. Recycled Water Management Plan (RWMP) Monitoring Locations .....	40
Figure 14. Groundwater Hydrographs for the Santa Margarita Aquifer.....	42
Figure 15. Santa Margarita Aquifer Groundwater Elevation Contour Map, September 2020 .....	45
Figure 16. Groundwater Hydrographs for the Monterey Aquifer.....	46
Figure 17. Groundwater Hydrographs for the Lompico Aquifer .....	49
Figure 18. Lompico Aquifer Groundwater Elevation Contour Map, September 2020 .....	50
Figure 19. Groundwater Hydrographs for the Butano Aquifer .....	53
Figure 20. Butano Aquifer Groundwater Elevation Contour Map, September 2020 .....	54
Figure 21. Historical Change in Aquifer Storage for Groundwater Reporting Area .....	56
Figure 22. Location of Low Impact Development Projects.....	63

## Appendices

---

Appendix A. Hydrographs of SVWD Production Wells

Appendix B. Hydrographs of Wells with Transducers

## Acronyms & Abbreviations

---

AMI	Automated Metering Infrastructure
amsl	above mean sea level
ASR	aquifer storage and recovery
bgs	below ground surface
BMO	Basin Management Objectives
BMP	best management practice
CASGEM	California Statewide Groundwater Elevation Monitoring
CDDW	California Division of Drinking Water
DCE	dichloroethylene
DWR	California Department of Water Resources
GAC	granular activated carbon
GPD	gallons per day
gpm	gallons per minute
GAC	granulated activated carbon
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GWMP	Groundwater Management Plan
GWRA	Groundwater Reporting Area
IRWMP	Integrated Regional Watershed Management Plan
JPA	Joint Powers Agreement
LID	low impact development
LTCP	Low-Threat Closure Policy
MCL	maximum contaminant level
mg/L	milligrams per liter
MHA	Mount Hermon Association
MRP	Monitoring and Reporting Program
MTBE	methyl-tert-butyl ether
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
O&M	operations and maintenance
PCE	tetrachloroethene
RACR	Groundwater Remedial Action Completion Report
RWQCB	Central Coast Regional Water Quality Control Board
SCMGB	Santa Cruz Mid-County Groundwater Basin
SGMA	Sustainable Groundwater Management Act
SLVWD	San Lorenzo Valley Water District
SMCL	secondary maximum contaminant level

SMGB.....Santa Margarita Groundwater Basin  
SMGBAC .....Santa Margarita Groundwater Basin Advisory Committee  
SMGWA.....Santa Margarita Groundwater Agency  
SVWD .....Scotts Valley Water District  
SWRCB .....State Water Resources Control Board  
TCE .....trichloroethylene  
TDS .....total dissolved solids  
µg/L.....micrograms per liter  
USEPA .....United States Environmental Protection Agency  
UWMP .....Urban Water Management Plan  
VOC .....volatile organic compounds  
WTP .....water treatment plant  
WY .....Water Year

## 1 EXECUTIVE SUMMARY

---

The Scotts Valley Water District (SVWD or District), located in Santa Cruz County, serves water to residents and businesses within an area of approximately 5.5 square miles that includes most of the City of Scotts Valley as well as some unincorporated areas north of the City. Groundwater from the Santa Margarita Groundwater Basin (SMGB or Basin) is the sole source of potable water supply for the District.

SVWD formally adopted its Groundwater Management Plan in 1994 under Assembly Bill 3030 (AB3030). Annual reports describing the groundwater conditions in the Scotts Valley area and the District's management programs have been prepared since 1994. Since 2017, SVWD has actively participated as a member agency of the Santa Margarita Groundwater Agency (SMGWA) that was formed under a joint powers agreement per the Sustainable Groundwater Management Act (SGMA) of 2014. The SMGWA Board meets monthly overseeing groundwater management activities of the SMGWA under the requirements of SGMA and development of a Groundwater Sustainability Plan (GSP). The GSP is required to be submitted to DWR by January 31, 2022.

This is the last annual report that will be prepared by SVWD. Starting next year, SVWD's WY2021 annual report will be replaced by the first GSP Annual Report that will cover the entire Santa Margarita Groundwater Basin. The Water Year (WY) 2021 GSP Annual Report will be prepared by the SMGWA with input by all member agencies.

Water Year 2020 was a below average rainfall year with only 20.3 inches of rainfall, which is 47% of average. Since the drought that ended in WY2015, rainfall has only been a cumulative 3 inches above normal. The cumulative rainfall deficit over the past 14-year period from October 2007 through September 2020 is 4.7 inches below average indicating that climate over that period is drier than historical climate.

Groundwater pumped by SVWD in WY2020 was 1,215 acre-feet, which is similar to the previous three years' pumping. Current pumping is 885 acre-feet less than the historical maximum pumping from 1997. In WY2020, approximately 64% of SVWD's groundwater production was from the Lompico aquifer and 36% was from the Butano aquifer. The District has no wells pumping from the Santa Margarita aquifer or Monterey formation.

SVWD maintains a number of ongoing activities to support the sustainable management of the groundwater resource including water use efficiency, a recycled water program, and water audit and loss control program. In WY2020, recycled water deliveries were approximately 178 acre-feet. Since WY2002, approximately 2,670 acre-feet of recycled water has been delivered for use.

Cumulative recycled water deliveries equate to banking more than twice the volume of groundwater that was pumped by SVWD in WY2020.

The quality of groundwater pumped from SVWD's wells is good. Iron and manganese treatment ensure that the concentrations of these constituents in delivered water is below the secondary maximum contaminant level. Volatile organic compounds (VOC) are below detectable levels in all production wells, except SVWD Wells #9 and #11A which continue to have VOCs detects below maximum contaminant levels.

SVWD is being kept informed about the remediation activities at regulated environmental compliance sites within the District boundaries. These sites have introduced primarily VOCs into the groundwater. The Watkins-Johnson Superfund site remediation is edging towards closure but still needs to complete the source control component of its remedial action to ensure protectiveness over the long-term. The site is currently designated as open-remediation for residential use due to existing soil gas plumes of benzene, TCE, PCE, arsenic and cadmium in soils. A draft Focused Feasibility Study proposing potential remediation alternatives including soil excavation was submitted by the site's owner to USEPA in January 2019.

Groundwater elevations in all aquifers in the GWRA have generally experienced recovery since 2010, with this trend continuing through WY2020. Groundwater levels in the Santa Margarita and Butano aquifers in WY2020 remain consistent with previous years, including the typical seasonal and climactic fluctuations. Groundwater levels in both the Monterey formation and Lompico aquifer increased slightly in WY2020, continuing a trend of recovery that began around WY2015. Specifically, Lompico aquifer groundwater levels have increased up to 40 feet over the past four years.

Despite increases in groundwater elevations shown in most hydrographs, there was a model-estimated loss of groundwater in storage during WY2020 of 890 acre-feet. This loss comes after last year's storage increase of 1,650 acre-feet. This results in a net increase in groundwater in storage of 760 acre-feet in the GWRA over the past two years.

## 2 INTRODUCTION

---

### 2.1 District Overview

The Scotts Valley Water District (SVWD or District) was formed under the County Water District Law, specifically California Water Code Section (CWC§) 30321 and received certification from the California Secretary of State in 1961. SVWD covers an area of about 5.5 square miles (Figure 1) in northern Santa Cruz County, and is located approximately five miles inland from the Monterey Bay. SVWD provides water to a majority of the residents and businesses in and around the City of Scotts Valley. Groundwater is the sole source of potable water supply for SVWD, so careful management is necessary to sustain the resource.

SVWD has been actively managing groundwater since the early 1980s; with the goal of increasing water supply reliability and protecting local water supply sources. In 1983, SVWD instituted a Water Resources Management Plan to monitor and manage water resources in the Scotts Valley area. In 1994, SVWD formally adopted a Groundwater Management Plan ([GWMP], Todd Engineers, 1994) in accordance with Assembly Bill 3030 (AB 3030), also known as the Groundwater Management Act (CWC §10750 *et seq.*).

### 2.2 Groundwater Management Goals and Objectives

The overall purpose of the GWMP is to provide a planning tool that helps guide the District in managing the quantity and quality of its groundwater supply, and to comply with the requirements of AB3030. The main goal of the GWMP is to better manage the sole source aquifers serving the community's drinking water. The goal of the SVWD GWMP is stated as follows:

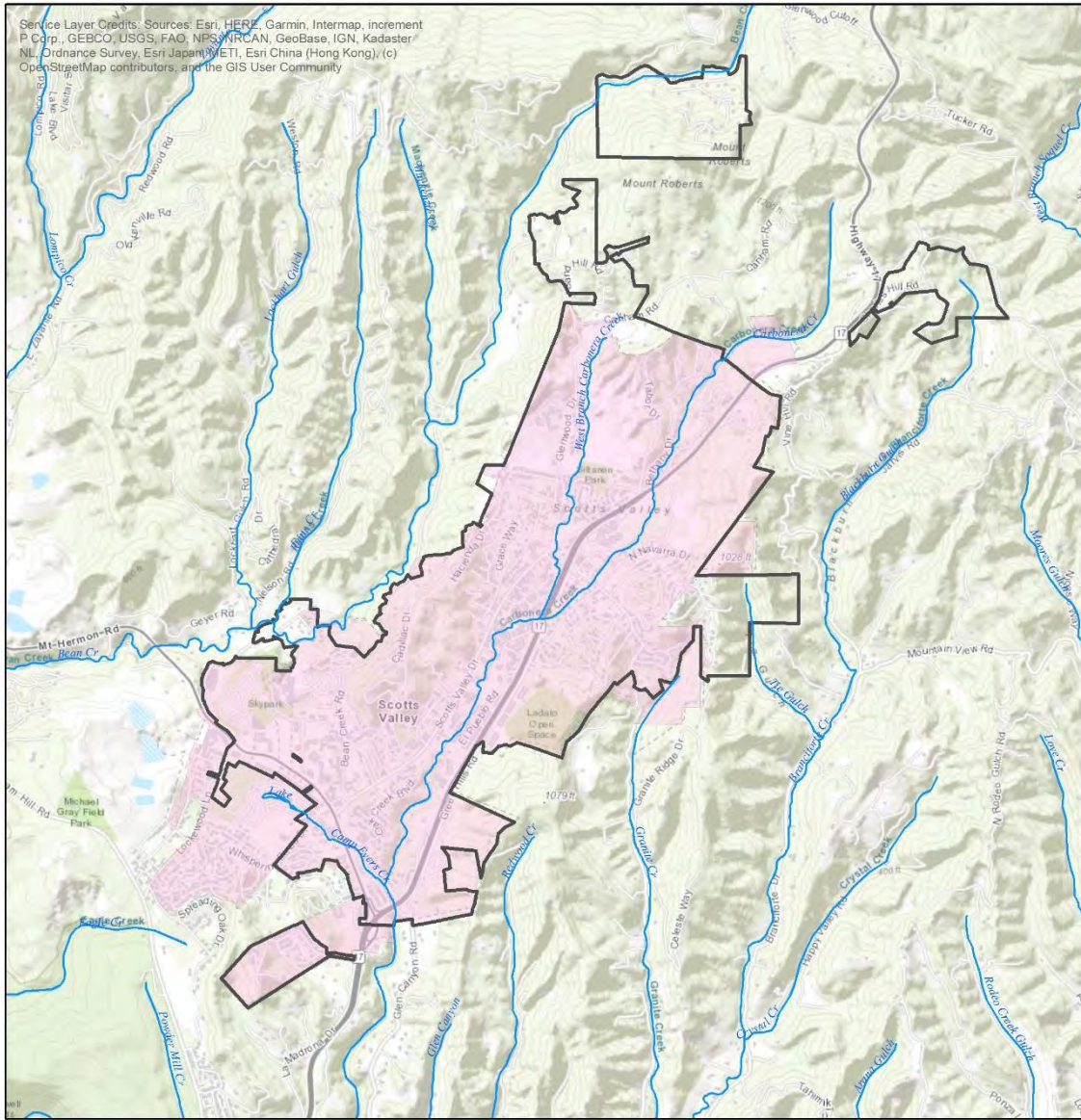
*“By implementation of a groundwater management plan for Scotts Valley, SVWD hopes to preserve and enhance the groundwater resource in terms of quality and quantity, and to minimize the cost of management by coordination of efforts among agencies.”*

Development of Basin Management Objectives (BMOs) are required for the GWMP under CWC §10753.7(a)(1) as a systematic process to support groundwater basin management. The BMOs for SVWD are currently summarized as:



- Encouraging public participation through an annual report of groundwater management activities and its presentation at one or more public meetings.
- Coordinating with other local agencies.
- Continued monitoring and evaluation of groundwater conditions.

- Implementing groundwater augmentation projects.
- Investigating groundwater quality and preventing groundwater contamination.

These BMOs continue to guide the SVWD groundwater management program and serve as the major objectives of groundwater management for the District.



**EXPLANATION**

-  Scotts Valley Water District
-  City of Scotts Valley

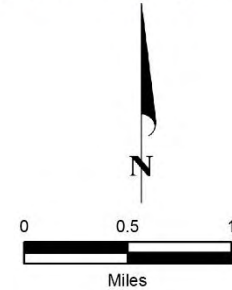


Figure 1. Scotts Valley Water District Service Area Map

## 2.3 Annual Report Format

An annual report is a key part of implementing the GWMP. The annual report evaluates and documents progress on meeting the GWMP goals and BMOs and identifies any concerns that should be monitored or addressed. This annual report is a management-level summary of groundwater conditions and groundwater management activities conducted by the District during Water Year (WY) 2020. The annual report is presented to the SVWD Board of Directors, distributed among local agencies and stakeholders, and made available to the public at the SVWD office and website.

The District has been producing annual reports since 1994. The format of the annual report has evolved over time to meet the needs of the District. Starting in 2013, the format of the annual reports began following a two-year cycle with a more comprehensive report provided in even years. Based on past experience, there are only incremental year-to-year changes in the basin; therefore, the two-year cycle provides a more cost-effective approach to accomplish the objectives of the annual report.

The odd year annual reports (2013, 2015, 2017 and 2019) are concise summaries focused on District operations whereas the even year annual reports (2014, 2016 and 2018) provide a more regional assessment that includes an evaluation of data from neighboring water districts and private suppliers, an assessment of water quality issues, an assessment of Basin conditions and the results from of the updated basin wide groundwater model.

In order to evaluate groundwater conditions within the context of California's climate cycle, data in the annual report are typically reported over a water year defined as the period from October 1 through September 30 of the following year. This period captures the cause-and-effect relationship on groundwater conditions of the typical rainy winter season followed by low rainfall and higher pumping during the summer.

## 2.4 Santa Margarita Groundwater Basin

The Santa Margarita Groundwater Basin (SMGB or Basin) covers approximately 33.2 square miles in the Santa Cruz Mountains. The SMGB forms a roughly triangular area that extends from Scotts Valley in the east, to Boulder Creek in the northwest, to Felton in the southwest (Figure 2). Groundwater is an important source of water supply for many residents living within the SMGB and is the primary water supply for SVWD.

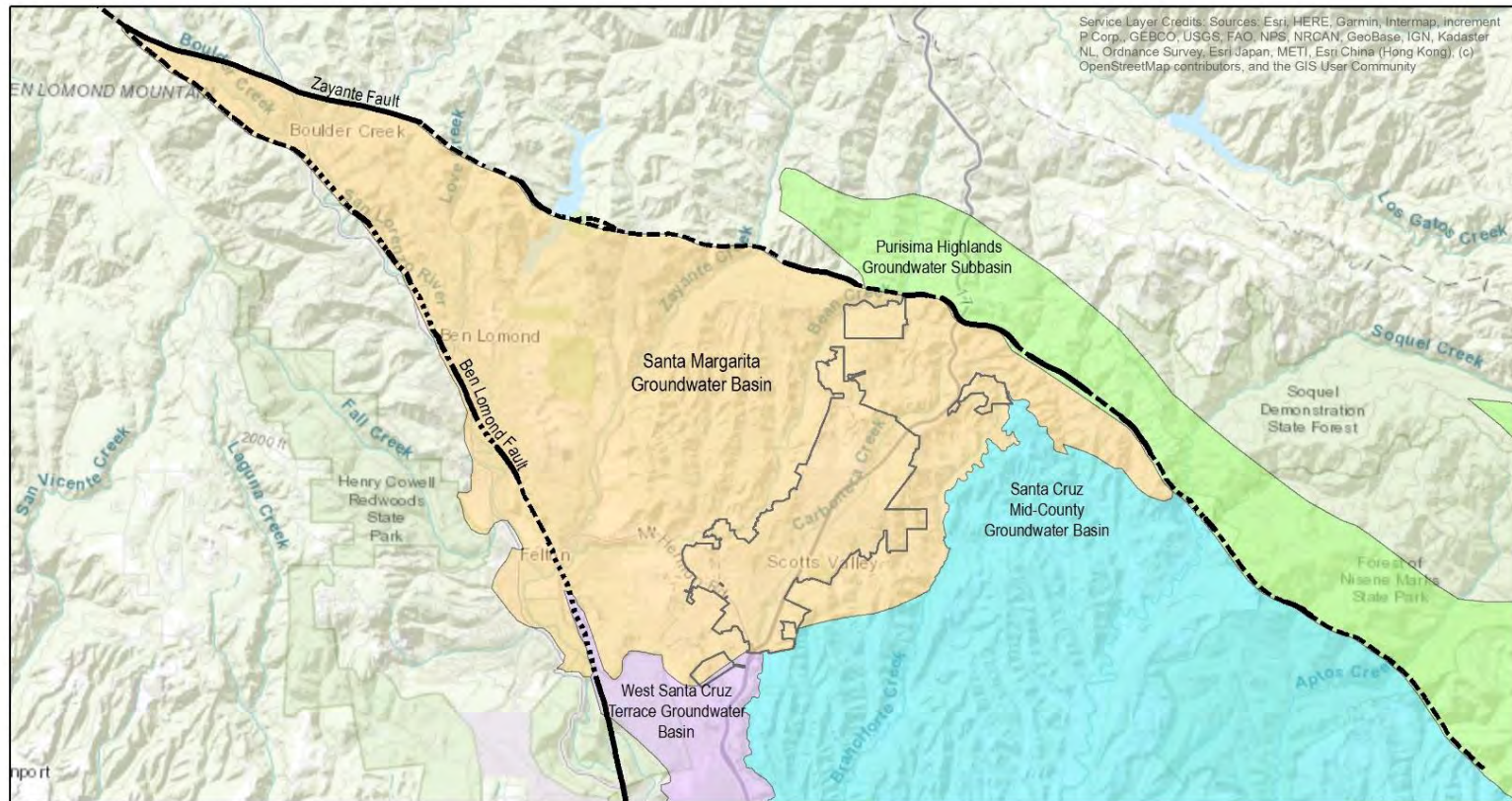
California's groundwater basins and subbasins are defined in the Department of Water Resources' (DWR) 2016 Bulletin 118-Interim Update (DWR, 2016). The interim update includes the SMGB as shown on Figure 2. In 2016, a modified basin boundary was submitted by

SVWD and approved by DWR as part of a process established for local agencies under the Sustainable Groundwater Management Act (SGMA) to request that DWR revise the boundaries of a groundwater basin or subbasin, including the establishment of new subbasins. The revised basin expands the former Scotts Valley Groundwater Basin (Bulletin 118 basin number 3-27) to include parts of the former Felton Area basin (Bulletin 118 basin number 3-50) and the former Santa Cruz Purisima Formation basin (Bulletin 118 basin number 3-21). The SMGB's eastern boundary coincides with the also modified Santa Cruz Mid-County Groundwater Basin (SCMGB).

The SMGB consists of a sequence of sandstone, siltstone, and shale underlain by granite that lie within a geologic trough called the Scotts Valley Syncline. This sequence of sedimentary rocks is divided into several geologic formations. Formations are defined by the type of rock and their relative geologic age based on studies by the United States Geological Survey (Clark, 1996, 1981, Muir, 1981, Brabb *et al.*, 1997, McLaughlin *et al.*, 2001). In the SMGB, the sandstone units serve as the primary aquifers that supply the majority of groundwater production for the local water supply. The Basin's main aquifers are:











- Santa Margarita Sandstone (Santa Margarita aquifer),
- Monterey Formation,
- Lompico Sandstone (Lompico aquifer), and
- Butano Formation (Butano aquifer).

The SMGB is a geologically complex area that was formed by the same tectonic forces that created the Santa Cruz Mountains. The Basin is bounded by two regional faults, the Ben Lomond Fault to the west and the Zayante Fault to the north (Figure 2). Figure 3 presents a geologic cross-section illustrating the highly folded sedimentary layers in the SMGB. Figure 4 indicates where the cross-section runs through the Basin and shows the location of both production and monitoring wells. The deepest part of the Basin is located near SVWD Wells #3B and Orchard Well (replaced Well #7A in 2018) where the basin is over 1,500 feet thick. The Basin's geological complexity is reflected by variability of the geologic layers. For example, in some areas the Santa Margarita and Lompico aquifers are separated by the Monterey aquifer, whereas in other parts of the basin the Santa Margarita and Lompico aquifers are in contact with one another. This geological complexity exerts a strong influence on groundwater flow in the Basin.



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

**EXPLANATION**

- |  |  |
|--|--|
|  Scotts Valley Water District               |  Mapped USGS Faults           |
|  DWR 2016 Interim Update Groundwater Basins |  Fault, certain               |
|  Santa Margarita                            |  Fault, approximately located |
|  Santa Cruz Mid-County                      |  Fault, concealed             |
|  Purisima Highlands Groundwater Subbasin    |  |
|  West Santa Cruz Terrace                    |  |

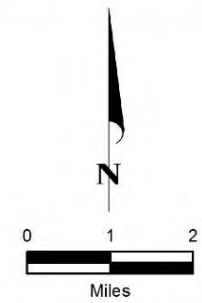


Figure 2. Santa Margarita Groundwater Basin

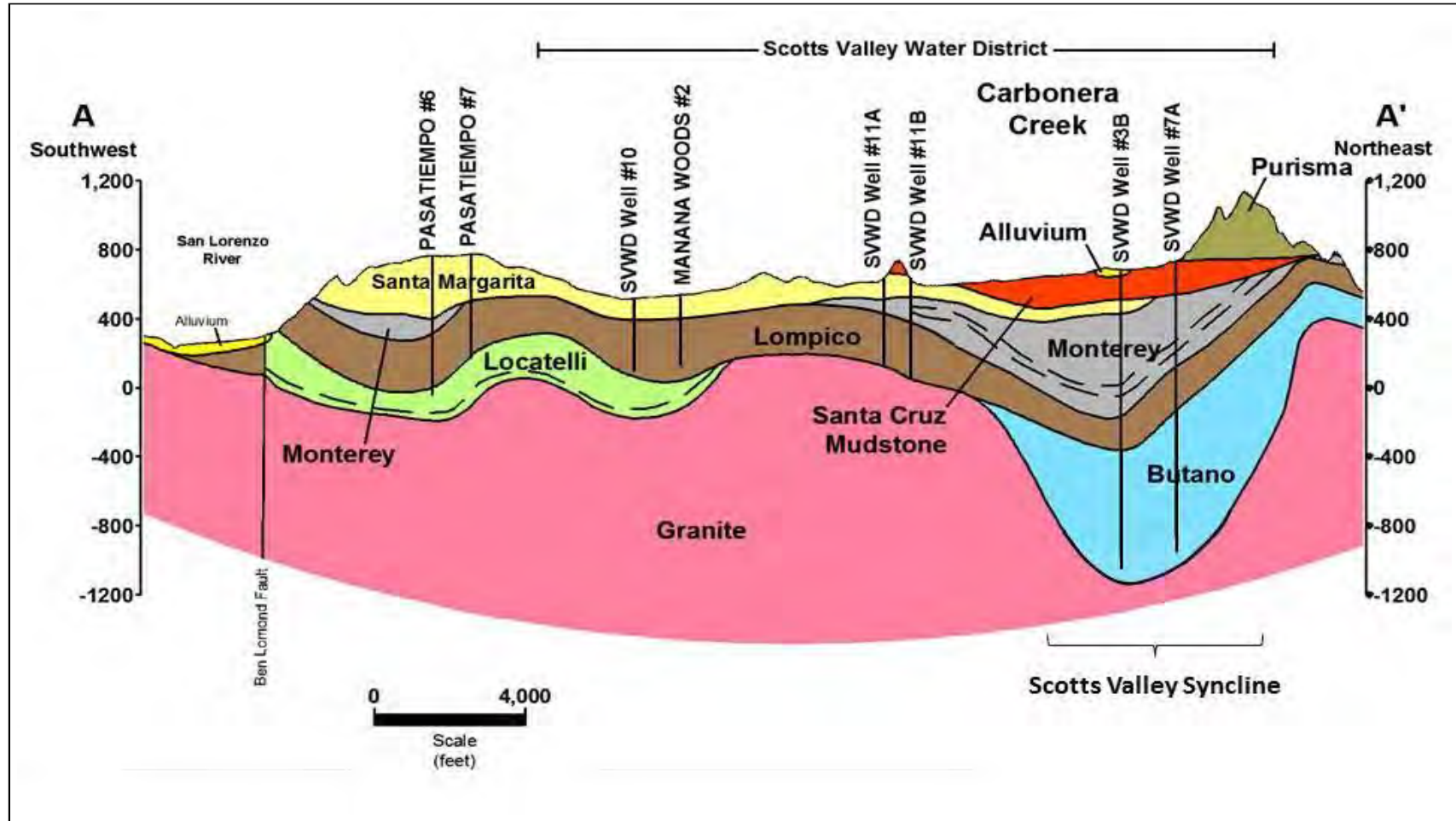
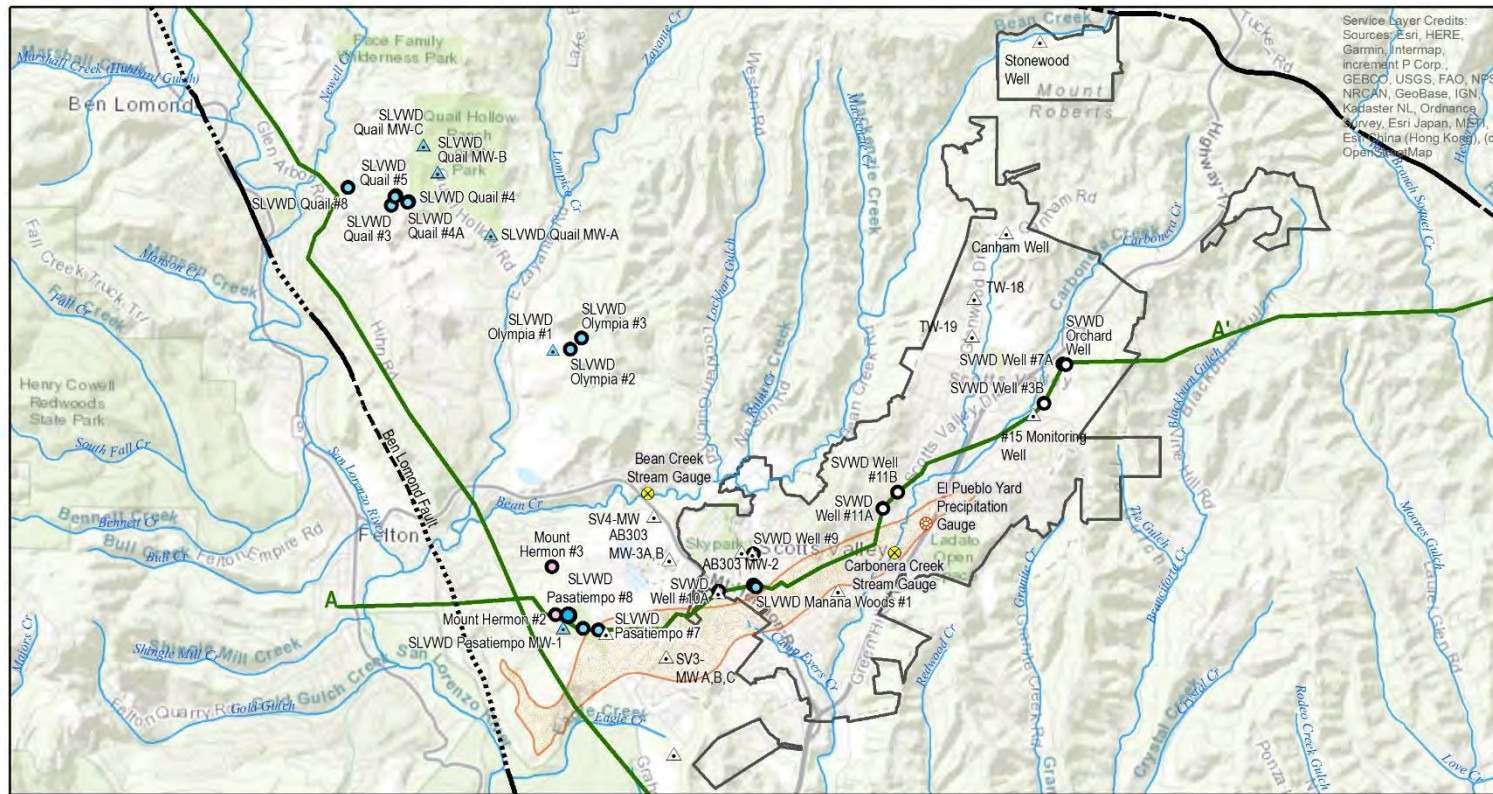














Figure 3. Geologic Cross-Section through the Scotts Valley Area



## EXPLANATION

- |  |  |
|--|--|
|  Scotts Valley Water District |  Gauge Locations  |
|  Production Well Location     |  GWMP Precipitation Gauge   |
|  SVWD                         |  GWMP Stream Gauge  |
|  SLVWD                        |  Location of Direct Contact between the Santa Margarita Sandstone and the Lompico Sandstone |
|  Mount Hermon                 |  Geologic Cross-Section Location  |
| <b>Monitoring Well Locations</b>   |  |
|  SLVWD                        |  |
|  SVWD                         |  |

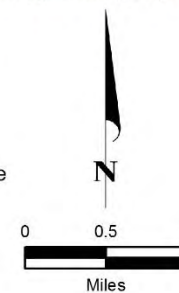


Figure 4. Cross-Section and Well Locations

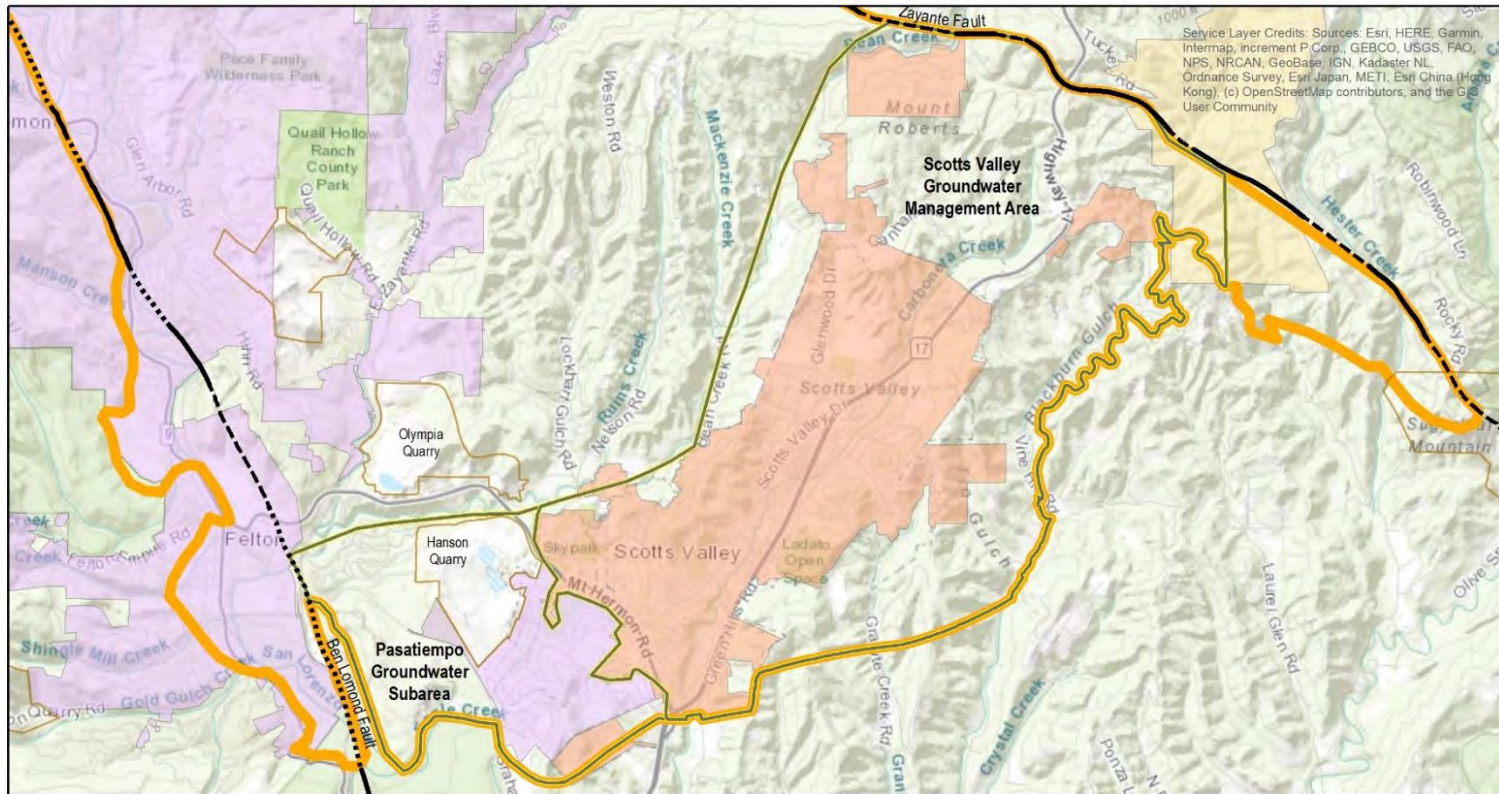
## 2.5 Groundwater Management Areas

This annual report focuses on the portion of the SMGB that underlies the SVWD and adjacent areas; referred to as the Groundwater Reporting Area (GWRA). Two groundwater management areas are defined in this report for easy reference to key portions of the Basin. The management areas have been revised from annual reports prior to 2016 to match the modified boundary of the SMGB.

The groundwater management areas include:

- The SVWD Groundwater Management Area (SVWD GWMA) is the portion of the SMGB pumped primarily by the SVWD. The SVWD GWMA is bounded by Bean Creek on the north, Hanson Quarry on the west, and the SMGB boundary to the south and east (Figure 5).
- The Pasatiempo Groundwater Subarea includes the portion of the SMGB pumped by the SLVWD, the Mount Hermon Association, and one SVWD well and is bounded by the SVWD GWMA on the east, Bean Creek to the north, and the SMGB boundary to the south and the Ben Lomond Fault to the west (Figure 5).

The SVWD GWMA represents the portion of the SMGB where the District is actively involved in groundwater management. The GWRA adds adjacent areas to provide a broader context for a more regional approach to groundwater management. For the most part, the annual report collects and assesses data from the GWRA to support SVWD's groundwater management activities in the SVWD GWMA.



**EXPLANATION**

- |   |   |
|---|---|
| <b>Water Districts</b>                              | <b>DWR 2016 Interim Update Groundwater Basins</b> |
| Scotts Valley Water District                        | Santa Margarita                                   |
| San Lorenzo Valley Water District                   | <b>Mapped USGS Faults</b>                         |
| Soquel Creek Water District                         | Fault, certain                                    |
| Groundwater Reporting Area with Management Subareas | Fault, approximately located                      |
| Quarry Location                                     | Fault, concealed                                  |

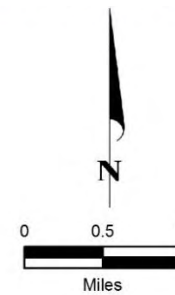


Figure 5. Groundwater Reporting and Management Areas

## 2.6 Historical Groundwater Issues

Starting in the late 1960s, groundwater levels in many parts of the SMGB, especially in the Lompico aquifer, experienced significant declines with cumulative totals of up to 200 feet in some areas. Between the mid-1990s and mid-2000s, the rate of decline slowed as a balance between recharge and pumping was approached. The greatest declines occurred between the late 1960s and mid-1990s. A variety of factors are assumed to have contributed to these declines, including:

- Increased groundwater pumping due to residential and industrial growth in the area.
- Reduced recharge from the surface to groundwater due to an increase in impermeable land surface associated with urbanization.
- Reduced recharge during extended periods of below average rainfall.

Since the mid-2000s, groundwater levels in the GWRA have generally stabilized. While the stabilization of groundwater levels in recent years is promising, understanding the history and controlling factors that influence these groundwater level trends provides important context for making future sound groundwater management decisions.

## 3 WATER SUPPLY SUMMARY

---

### 3.1 Precipitation Summary

Precipitation is the primary source of groundwater recharge through both direct percolation of rainfall through the soil and infiltration of runoff through streambeds. Therefore, monitoring annual precipitation is a key component of understanding water supply trends and groundwater conditions in the SVWD GWMA. Average annual precipitation at El Pueblo weather station in Scotts Valley is 41.7 inches based on measurements collected since 1947 (Figure 6). In this period, the highest annual rainfall in Scotts Valley was 86.2 inches in WY1983, and the lowest annual rainfall was 19.9 inches in WY1976. Due to the mountainous nature of the Basin, precipitation across the District's service area can vary up to 8 inches, with increasing precipitation in a westerly direction.

Precipitation in WY2020 of 20.9 inches is the lowest since 2014. The year's precipitation amounts to about 50% of average and is only 0.4 inches more than the 1947 historical low of 19.9 inches (Figure 6). Water Year 2020 is one of nine years with below average precipitation over the past 14 years. The cumulative rainfall deficit over the 14-year period from October 2007 through September 2020 is 4.7 inches below average indicating that climate over that period is drier than historical climate. Since the end of the most recent drought (end of 2015), rainfall is only a cumulative 3 inches above average despite WY2017 being a very wet year. This small above average cumulative rainfall is only 5.6% of the cumulative 53.5-inch rainfall deficit that occurred over the 2012-2015 drought.

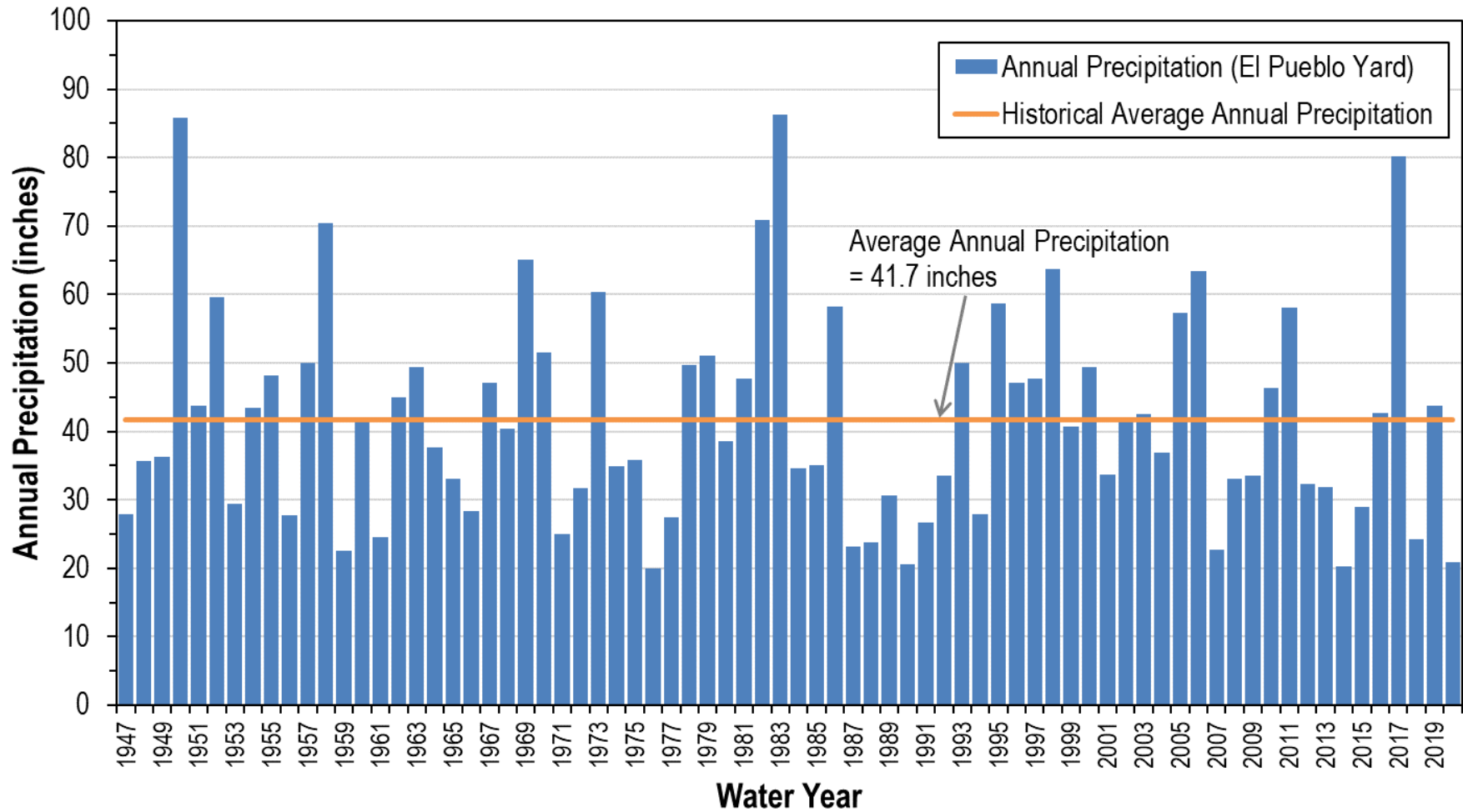


Figure 6. Annual Precipitation for Scotts Valley by Water Year

## 3.2 SVWD Water Supply

SVWD relies solely on groundwater from the SMGB for providing potable water to its customers. Recycled water is also available for non-potable uses such as landscape irrigation.

### 3.2.1 Groundwater Pumping

Annual SVWD pumping in WY2020 was 1,215 acre-feet, which is similar to the previous three years' pumping (Figure 7). Current pumping is 885 acre-feet less than the historical maximum pumping in 1997 (Table 1).

Note that this annual report presents actual groundwater pumped from the Basin, while SVWD frequently reports groundwater production and demand for other purposes. Production is the volume of groundwater pumped minus any process water that is not put into the distribution system. Demand is production plus/minus change in storage volumes. Production volumes are therefore less than the groundwater pumping volumes reported in this annual report. In comparison to groundwater pumped, in WY2020, production volumes that account for process water were 1,160 acre-feet, 47 acre-feet more than WY2019's production of 1,113 acre-feet.

SVWD currently operates five production wells: #3B, Orchard, #10A, #11A, and #11B. The locations of these wells are shown in Figure 4. Groundwater pumping by well varies seasonally and annually to meet changing local water demand and allow for well maintenance activities. More information on how much each of these wells pumps is included in Section 3.4.2

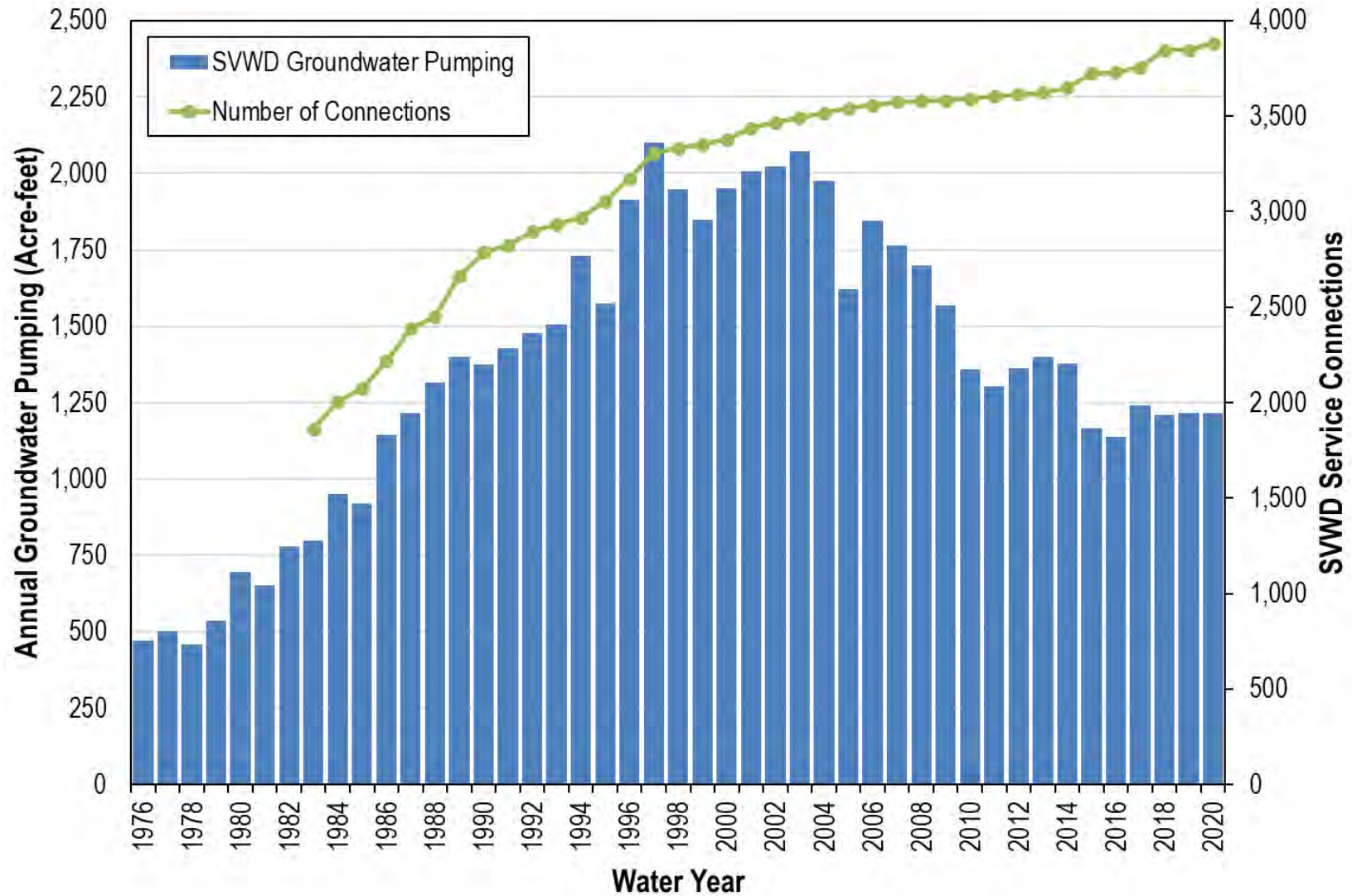


Figure 7. Annual SVWD Groundwater Pumping and Service Connections

In WY2020, 100% of SVWD groundwater pumping was derived from the Lompico and Butano aquifers (Table 1). Groundwater pumped from the Lompico and Butano aquifers accounts for 73% and 27% of WY2020 SVWD pumping, respectively. Annual groundwater pumping from the Lompico aquifer has declined noticeably since WY2014. WY2020 pumping from the Lompico aquifer is 52% of the pumping high of 1,483 acre-feet in WY2003. Similarly, WY2020 pumping in the Butano aquifer is 40% of the pumping high of 735 acre-feet in WY1997. The amount of Butano aquifer pumping decreased between WY2019 and WY2020 largely due to reduced pumping at the Orchard Well.

Table 1. WY2010 to WY2020 SVWD Groundwater Pumping by Aquifer and Recycled Water Usage

Aquifer	Historical Maximum	WY2011	WY2012	WY2013	WY2014	WY2015	WY2016	WY2017	WY2018	WY2019	WY2020
Monterey	426 (1984)	3	4	35	23	0	2	6	4	2	0
Lompico	1,483 (2003)	969	964	1,020	989	896	814	923	884	703	778
Butano	735 (1997)	320	383	345	365	237	323	312	322	510	437
Groundwater	2,100 (1997)	1,292	1,351	1,400	1,376	1,133	1,139	1,242	1,211	1,215	1,215
Recycled Water	200 (2013)	163	184	200	199	184	195	162	196	174	178
Total Water Supply	2,096 (2003)	1,455	1,535	1,600	1,575	1,317	1,334	1,404	1,407	1,389	1,393

Units in acre-feet

Thirty-five single family residence connections and one commercial/industrial connection were added in WY2020. The total non-fire related service connections is 3,882, as shown on Figure 7.

SVWD Wells, #10A, #11A and #11B produce exclusively from the Lompico aquifer, whereas SVWD Wells #3B and the Orchard Well (replacement for Well #7A) are screened across both the Lompico and Butano aquifers. Based on studies by Kennedy Jenks (2015), it is estimated that 60% of the groundwater pumped from SVWD Well #3B and the Orchard Well is from the Butano aquifer and 40% is from the Lompico aquifer. This pumping distribution has been applied to historical pumping (Table 1), so the values may differ from past annual reports.

A revised geologic interpretation has SVWD Well #9 screened completely within the Monterey Formation rather than the Santa Margarita aquifer (Kennedy Jenks, 2016a). This change is reflected on Table 1. The maximum estimated annual groundwater pumped from the Monterey Formation was 426 acre-feet in WY1984 when groundwater levels were about 200 feet higher. Due to lowered groundwater levels and low hydraulic conductivity in the Monterey Formation,

SVWD Well #9 has been used sparingly over the past decade; SVWD did not produce groundwater from the Monterey Formation during WY2020.

Groundwater pumping is highest in the dry season months of May through October and lowest in the wetter months of December through March due primarily to seasonal changes in outdoor use (Figure 8). The timing of increased outdoor water use typically shifts with the amount of springtime precipitation. If March through May rainfall is above average, outdoor water usage tends to be below-average, whereas below-average spring rain tends to increase outdoor water use.

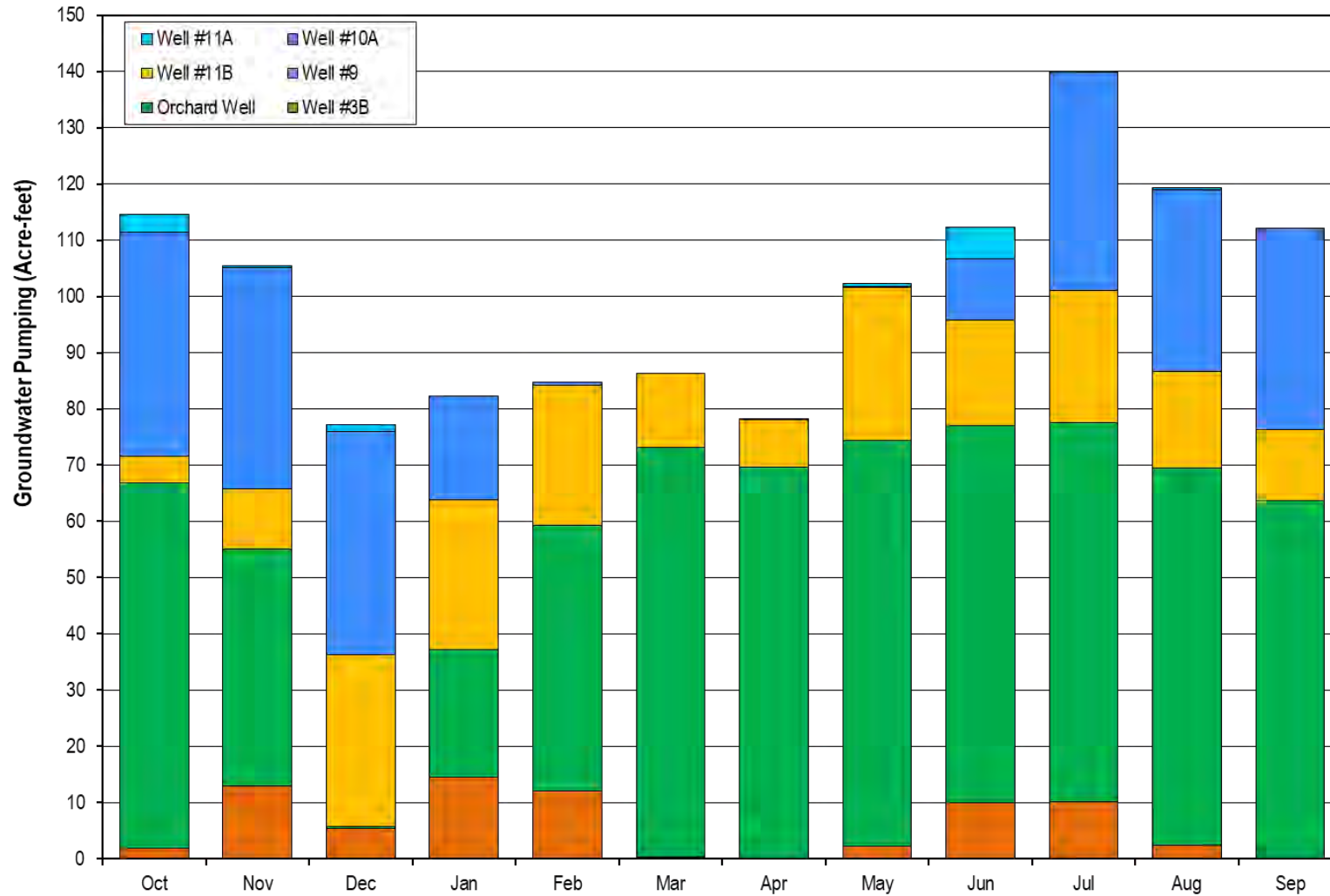


Figure 8. SVWD Groundwater Pumping by Month for WY2020

### 3.2.2 Recycled Water Deliveries

The Recycled Water Program has issued 56 permits in total, with four new connections issued in WY2020 (Figure 9). From WY2002 through WY2020, approximately 2,670 acre-feet of recycled water has been delivered to customers (Table 2). The cumulative use of recycled water since 2002 is equivalent to 220% of the District's groundwater pumping in WY2020. Since recycled water is used in-lieu of pumped groundwater, it is assumed that an equivalent volume of groundwater remains in the SMGB and is available to support future water supply needs.

Recycled water deliveries have increased annually from the program's inception through WY2013. Since 2013, deliveries have not increased much, but have fluctuated between 160 and 199 acre-feet per year. Deliveries in WY2020 increased slightly to approximately 178 acre-feet from 174 acre-feet in WY2019 (Figure 9 and Table 2).

There is a strong correlation between rainfall and recycled water deliveries, with wet years such as Water Years 2017 and 2019 having reduced recycled water demand (Figure 9 and Table 2). Other reasons for decreased demand could be due to recycled water customers replacing their landscapes or improving their irrigation practices as a consequence of the drought and associated efforts to use water more efficiently.

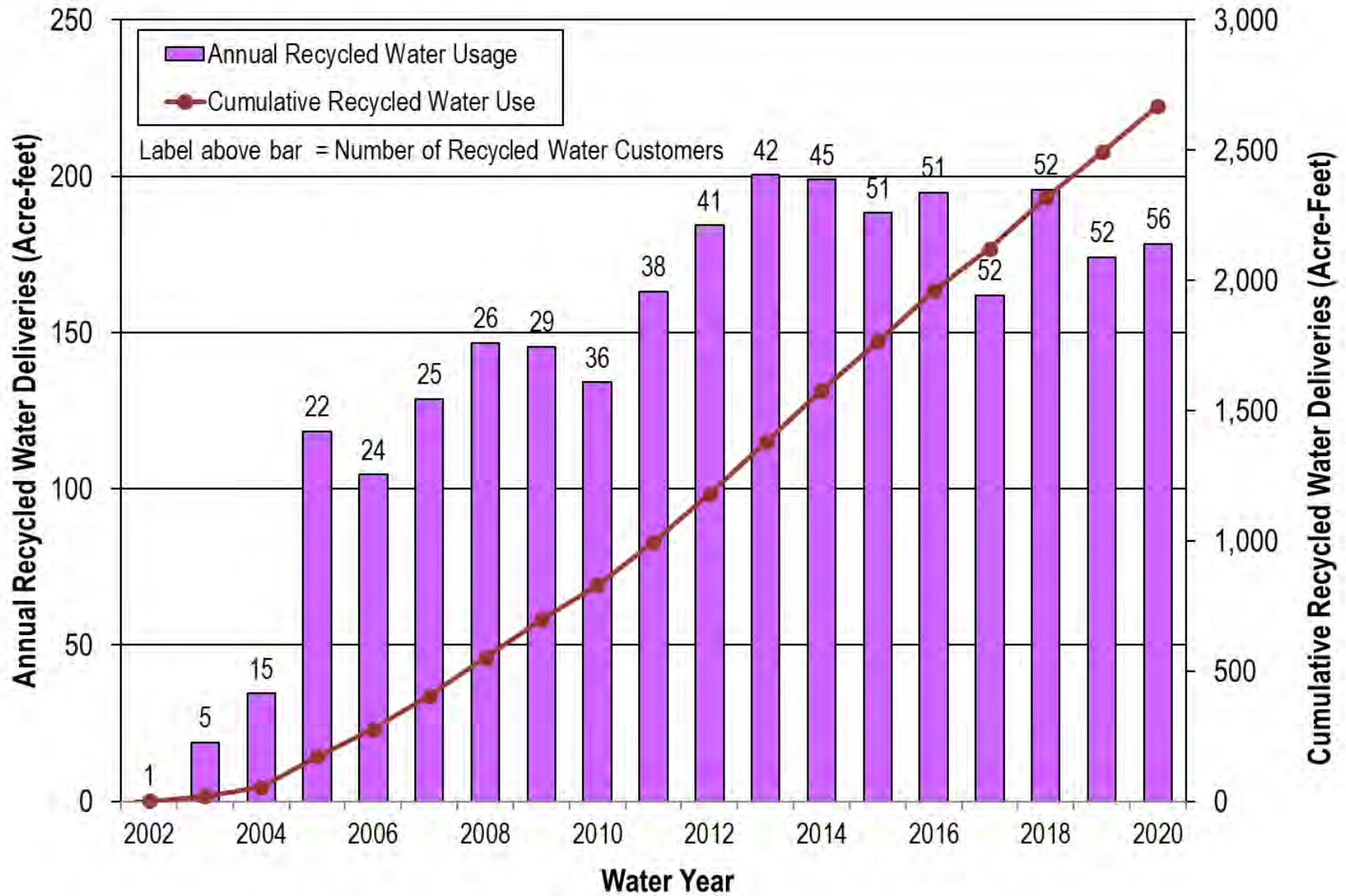


Figure 9. Annual and Cumulative Recycled Water Deliveries

Table 2. WY2011 to WY2020 SVWD Groundwater Pumping and Recycled Water Usage

Source	Historical Maximum	WY2011	WY2012	WY2013	WY2014	WY2015	WY2016	WY2017	WY2018	WY2019	WY2020
Groundwater	2,100 (1997)	1,292	1,351	1,400	1,376	1,133	1,139	1,242	1,211	1,215	1,215
Recycled Water	200 (2013)	163	184	200	199	184	195	162	196	174	178
Total Water Supply	2,096 (2003)	1,455	1,535	1,600	1,575	1,317	1,334	1,404	1,407	1,389	1,393

Units in acre-feet

### 3.2.3 Seasonality of Groundwater Pumping

Groundwater pumping by the District is greatest in the dry season months of May through October and lowest in the wetter months of December through March due to seasonal changes in outdoor use. The timing of increased outdoor water use typically shifts with the amount of springtime precipitation. If March through May rainfall is above average, outdoor water usage tends to be below-average, whereas below-average spring rain tends to increase outdoor water use.

To assess changes in SVWD water use trends, a comparison of the District's recent monthly groundwater pumped is compared to average groundwater pumped from historical periods when water use was higher. The results are shown on Figure 10.

Figure 10 shows four historical average monthly groundwater extraction rates. The first period represents the period of highest historical water use from WY1997 through WY2004, when the average annual groundwater pumped was about 1,980 acre-feet. The second period presents the period of declining groundwater extraction from WY2005 to WY2011, when the average annual groundwater pumped was about 1,630 acre-feet. The third period covers the recent drought from WY2012 through WY2015 when the average annual groundwater pumped was about 1,330 acre-feet. The fourth period includes the five years since the drought through to WY2020 where the average annual groundwater pumped has been about 1,204 acre-feet. Monthly pumping volumes for the four periods are included on Figure 10 as separate vertical bars of different colors.

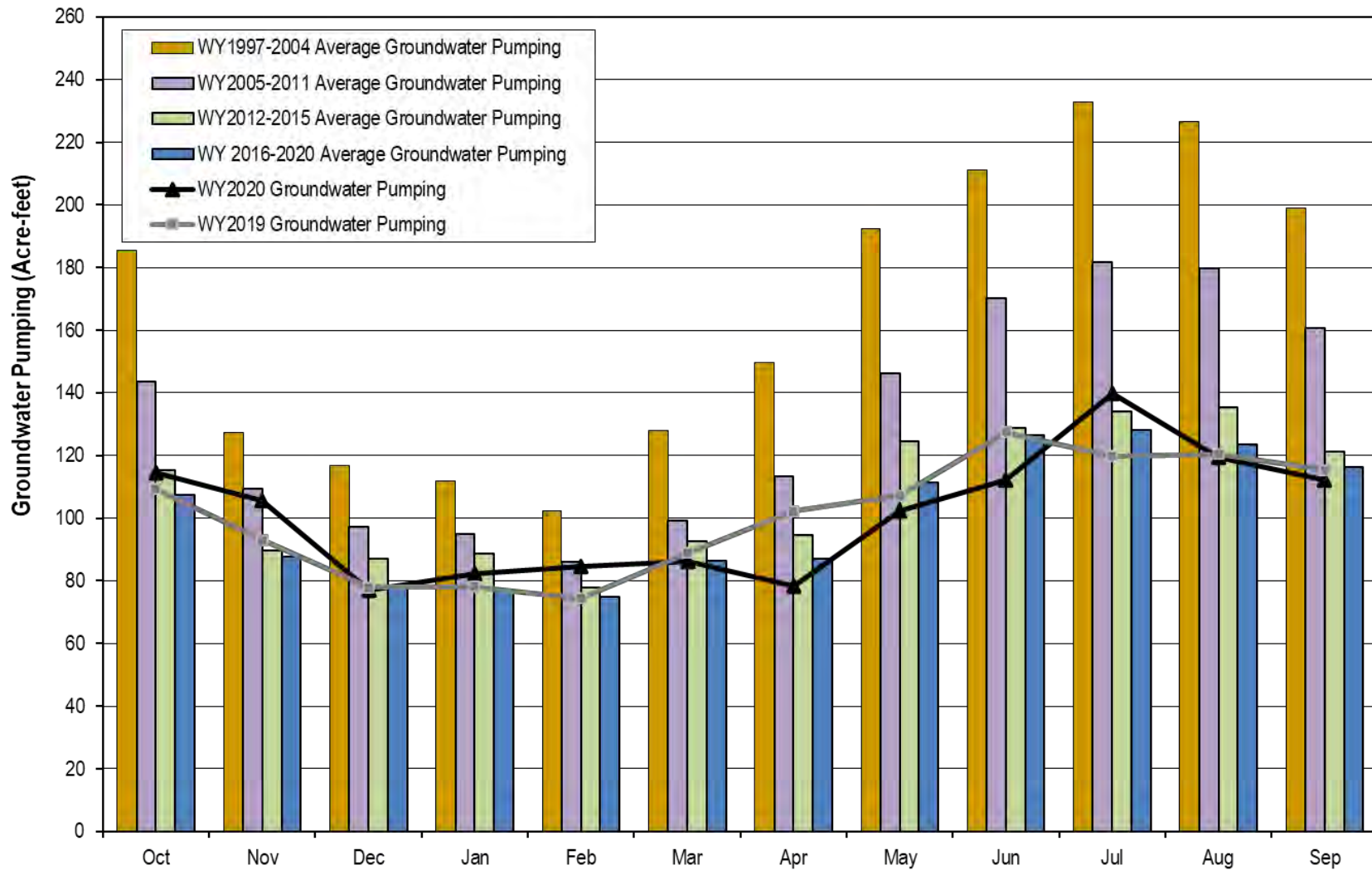


Figure 10. SVWD Monthly Groundwater Pumping Comparison

Comparing historical averages to average monthly groundwater pumping for WY2016 through WY2020, monthly groundwater pumped is below pre-drought historical averages, and even below monthly pumping during the recent drought. Monthly pumping differences are most pronounced during the summer months of May through October (Figure 10) when outdoor demand for irrigation is greatest. The difference between the maximum and minimum monthly pumping in WY2016 to WY2020 is 61 acre-feet, whereas for the WY1997 to WY2004 period it was 133 acre-feet.

The peak monthly difference in groundwater pumping indicates the District's ongoing programs to support sustainable management of its groundwater resources, including the use of recycled water, water use efficiency and water loss reduction programs, have contributed to reduced water demands that results in less groundwater pumping. Other factors that have influenced water demand include variations in the weather, economic conditions, plumbing code changes, water pricing, and the number and type of customers.

### 3.3 Regional Groundwater Pumping

In addition to SVWD, groundwater in the GWRA is pumped for water supply purposes by other water purveyors, small water systems, and private pumpers. Groundwater has also been pumped historically for purposes of environmental remediation and for industrial uses. Figure 11 provides a summary of annual groundwater pumped by user type in the GWRA. The users include:

- San Lorenzo Valley Water District (SLVWD) – SLVWD's Pasatiempo wellfield which extracts exclusively from the Lompico aquifer is within the GWRA. Groundwater pumped by SLVWD in the GWRA was 282 acre-feet in WY2019 and 362 acre-feet in WY2020. WY2020 pumping was the highest since WY2015. While pumping in the beginning of the water year was typical, pumping increased in September 2020 in response to the August CZU Complex fires that damaged SLVWD delivery infrastructure in the North System thereby placing increased demand on its groundwater sources. Groundwater pumping from SLVWD's wellfields outside the GWRA is not included in this report.
- Mount Hermon Association (MHA) – Pumping by MHA was 137 acre-feet in WY2019 and 177 acre-feet in WY2020. WY2015 had the lowest pumping on record at 114 acre-feet. The high was 232 acre-feet in WY2008. Groundwater is pumped from two wells screened in the Lompico aquifer.
- Industrial Wells – Historically, most industrial groundwater pumping was carried out by the Hanson Quarry before the quarry was closed in 2004. Currently, no large industrial wells are identified in the GWRA. The maximum industrial pumping was 485 acre-feet in

WY1987. Groundwater pumping was primarily from the Santa Margarita and Lompico aquifers.

- Environmental Remediation – no groundwater for environmental remediation has been pumped since WY2016. The Watkins-Johnson and Scotts Valley Dry Cleaners groundwater remediation systems have been shut down since 2016 and 2015, respectively. Historical pumping for remedial purposes was primarily from the Santa Margarita aquifer.
- Private Wells – Pumping from private wells for domestic use, landscape ponds, and irrigation is not metered, but is estimated at approximately 178 acre-feet in the GWRA for WY2020 (Table 3). Note that the Valley Gardens golf course was closed at the end of 2018 and its landscape ponds and turf have not been maintained. The maximum historical private pumping estimate was 381 acre-feet in WY1987 (Todd, 1998). We assume that private pumping has approximately remained the same from WY2015 to WY2020. As part of development of the GSP and the update of the Basin’s groundwater model, an evaluation of the number of private wells pumping for domestic use was made based on residential parcels not served water by a small water system, MHA, or either water district. From that evaluation, it was estimated there are approximately 777 private wells pumping for domestic use within the Basin. Of those parcels identified, 268 parcels are within the GWRA. Private pumpers extract groundwater from the Santa Margarita, Monterey and Lompico aquifers. Based on the recent groundwater model update, the amount small water systems (SWS) were pumping in previous annual reports was underestimated and pumping of the Santa Margarita aquifer to replenish landscape ponds was not included. Table 3 summarizes WY2020 pumping in the GWRA and Basin based on groundwater model inputs developed for the update.

Table 3. Summary of WY2020 Private Groundwater Pumping in the GWRA and SMGB

Groundwater Use	Groundwater Reporting Area	Santa Margarita Groundwater Basin
Domestic (assume 0.3 acre-feet per connection)	80	233
Valley Gardens Golf Course	0	0
Small Water Systems	37	116
Landscape Ponds	123	123
<b>Total Private Supply</b>	<b>240</b>	<b>472</b>

Units in acre-feet

Annual groundwater pumping from the GWRA has remained similar over the past several years. Total groundwater pumping in the GWRA was estimated at 1,932 acre-feet in WY2020 (Table 4). This represents a 118 acre-foot increase in GWRA pumping from WY2019 but remains lower than pre-2015 pumping. Total GWRA pumping in WY2020 was 58% less than a high of 3,679 acre-feet in WY1997 (Figure 11). The long-term reduction is due to decreased pumping by water purveyors combined with the elimination of industrial groundwater use and environmental remediation pumping. Note that Figure 11 does not include Table 3 pumping from small water systems and landscape ponds, and therefore likely underestimates total groundwater pumping by about 160 acre-feet annually for all years.

Table 4 summarizes total groundwater pumping in the GWRA by aquifer. In the GWRA for WY2020, about 75% of the total pumping is from the Lompico aquifer, 22% is from the Butano aquifer, and the remaining 3% is from the Santa Margarita aquifer and Monterey Formation. Larger municipal and private wells typically pump from the Lompico and Butano aquifers which can sustain higher pumping rates. The Santa Margarita aquifer and Monterey Formation are generally pumped by lower-capacity private wells.

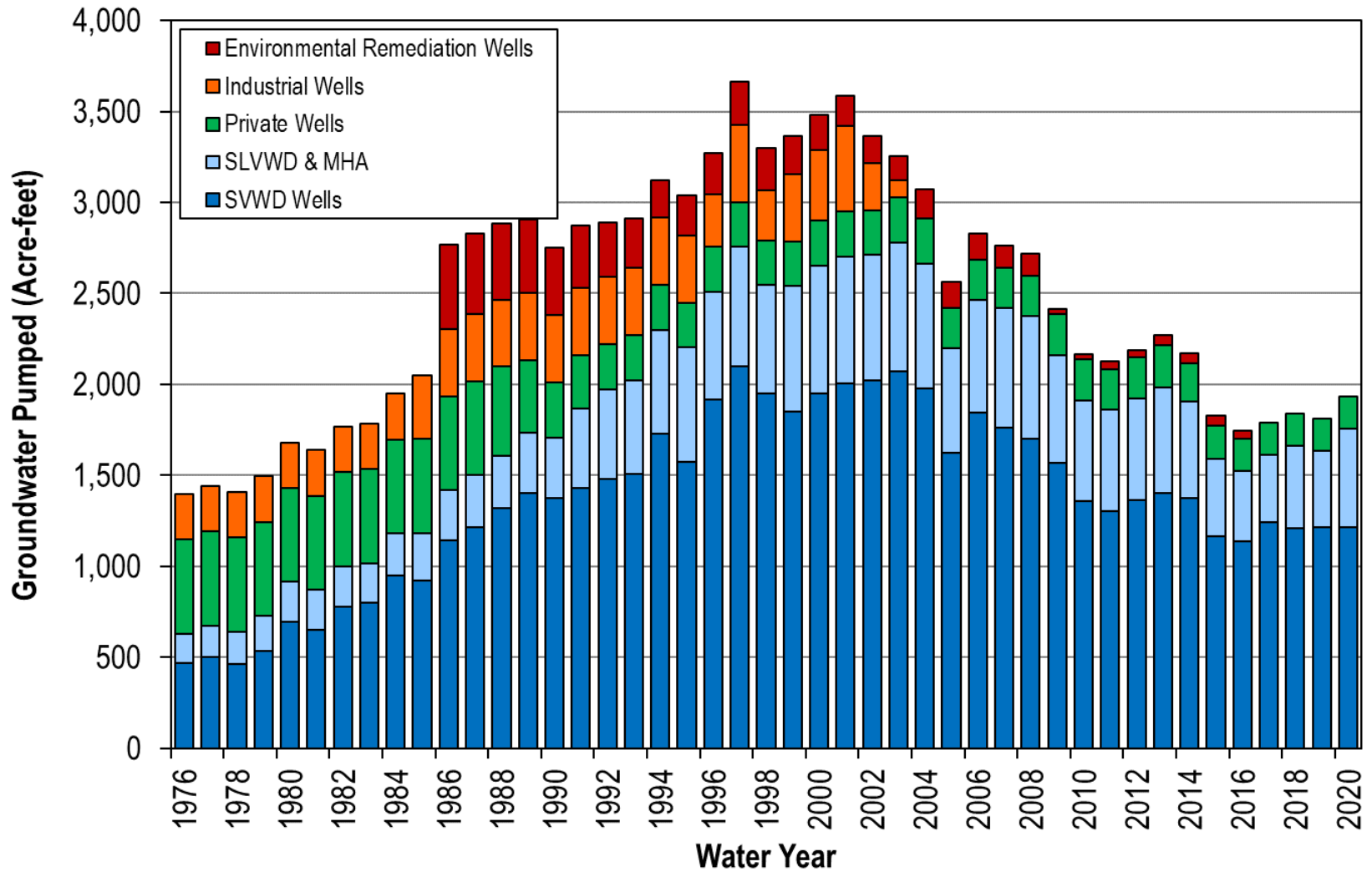


Figure 11. Regional Groundwater Pumping by User Type in the GWRA

Table 4. WY2011 to WY2020 Groundwater Pumped in the GWRA by Aquifer

Aquifer	Historical Maximum	WY2011	WY2012	WY2013	WY2014	WY2015	WY2016	WY2017	WY2018	WY2019	WY2020
Santa Margarita	894 (1987)	63	56	74	71	74	57	14	14	14	14
Monterey	587 (1984)	49	50	82	66	37	39	43	41	39	37
Lompico	2,705 (2003)	1,743	1,739	1,537	1,425	1,449	1,322	1,421	1,462	1,252	1,445
Butano	738 (1997)	323	386	576	608	237	323	312	322	510	437
Total	3,665 (1997)	2,178	2,231	2,270	2,169	1,797	1,740	1,790	1,838	1,814	1,932

Units in acre-feet

### 3.4 SVWD Production Wells

SVWD currently operates six production wells: SVWD Wells #3B, Orchard, #9, #10A, #11A, and #11B. The locations of these wells are shown on Figure 4.

#### 3.4.1 Condition of Production Wells

Understanding the condition of the currently active SVWD production wells is necessary to help ensure a reliable water supply for the District. Table 5 provides additional details regarding well completions. The service life of a well is difficult to predict and is dependent on several variables. Age of the well is one key indicator. The ages of SVWD's active wells range from 2 to 31 years old.

SVWD Wells #3B, #9, and #11A have limited capacity due to their inability to sustain pumping rates. SVWD Well #3B has structural well casing issues. It is believed that SVWD Well #9 is perforated entirely in the Monterey aquifer (Kennedy Jenks, 2016a), which is a poorer-quality and lower-yielding aquifer. SVWD Well #11A's capacity is limited because of a number of factors, including limited saturated aquifer thickness, its well design is likely not optimal, and because of local variations in aquifer properties (Feeney, 2015). The District is currently planning for both a new well to provide redundancy and to replace Well #3B with a new well on the same site.

Most wells show some corrosion over time. Corrosion of the metal in well screens and casing is typically the result of chemical processes related to the high content of dissolved gases (e.g.,

carbon dioxide, oxygen, or hydrogen sulfide) or high concentrations of certain constituents such as chloride. Wells constructed with dissimilar metals, such as stainless-steel screens and high-strength low-alloy (HSLA) or mild steel casings are known to suffer from galvanic corrosion where the metals are joined. SVWD Wells #10A, #11A, and #11B are all constructed with dissimilar metals. Conditions at the existing SVWD production wells are continued to be monitored for signs of corrosion.

Table 5. Summary of Well Completion Data for Currently Active SVWD Production Wells

SVWD Well Name	Year Installed	Screened Interval Depth (feet bgs) <sup>1</sup>	Casing Material	Last Video Log	Most Recent Rehabilitation
Well #3B	1995	700-730, 880-1050, 1180-1370, 1400-1670	16-inch diameter stainless-steel well casing, 0.040-inch slot well screen	2017	Mar-2007: Pump, motor & wire replacement. Late 2017: Well casing is corroded, and bottom of the well is filled with sand. Pump has been lifted and well is currently not sanding
Orchard Well (replaced Well #7A)	2018	705-784, 805-1063, 1084-1455	14-inch diameter stainless-steel well casing, 0.050-inch louver well screen	Feb-2018	None
Well #9	1980	155-195, 315-355	12-inch diameter mild steel casing, 0.080-inch slot well screen	Jan-2014	Jan-2014: Mechanical &/or chemical rehab; and pump, motor & wire replacement
Well #10A	2007	280-380, 400-450	12-inch diameter well casing, HSLA steel to 154 feet and stainless steel below; 0.040-inch stainless steel wire-wrap screen	Jun-2012	Jun-2012: Mechanical &/or chemical rehab; and pump, motor & wire replacement Full rehab planned for Mar-2017
Well #11A	1997	399-419, 459-469, 495-515	mild steel well casing, 12-inch diameter to 401 feet and 10-inch diameter below, 0.012-inch stainless steel wire-wrap screen	Sep-2007	Sep-2007: Pump, motor & wire replacement
Well #11B	1999	348-388, 423-468, 500-515	mild steel well casing, 14-inch diameter to 343 feet and 12-inch diameter below, 0.012-inch stainless steel wire-wrap screen	Jan-2019	Jun-2018: Airlift re-development which inadvertently removed natural filter pack and well is sanding. In 2019: A downhole sand separator was installed and three holes in the casing were swaged

Note: <sup>1</sup>feet bgs = feet below ground surface

### 3.4.2 Groundwater Pumping by Well

Groundwater pumping varies from year to year to meet the water demand. To meet changing operational conditions and seasonal demand fluctuations, pumping is shifted between production wells. Groundwater pumping is also shifted between wells to allow for maintenance. In WY2020, Orchard Well and Well #10A were the two highest producing wells (Table 6), pumping 75% of SVWD's potable groundwater supply. It should be noted that Well #3B and #11A are currently being operated substantially below their historical maximum annual pumping volumes as shown in Table 6.

Table 6. WY2011 to WY2020 SVWD Groundwater Pumping by Well

SVWD Well	Historical Maximum	WY2011	WY2012	WY2013	WY2014	WY2015	WY2016	WY2017	WY2018	WY2019	WY2020
#3B	409	226	143	208	273	160	257	167	337	7	72
#7A	991	312	501	368	335	236	281	354	destroyed & replaced by Orchard Well		
Orchard	-	-	-	-	-	-	-	-	200	843	657
#9	426	3	4	35	23	0	2	6	4	2	0
#10A	544	362	378	391	429	374	331	333	371	234	256
#11A	152	1	13	59	19	39	22	34	39	28	11
#11B	683	397	323	339	298	324	246	348	260	101	219
Total	2,077 (2003)	1,292	1,351	1,400	1,376	1,133	1,139	1,242	1,211	1,215	1,215
Screened in:	Lompico & Butano	Monterey		Lompico							

Units in acre-feet

### 3.4.3 Groundwater Levels in Production Wells

Historical groundwater levels collected and reported for the production wells include both pumping (dynamic) and non-pumping (static) conditions. Monitoring dynamic and static groundwater levels provides a means for evaluating well performance. If well efficiency declines over time, this may be indicated by increasing differences between static and dynamic groundwater levels, thereby demonstrating the well is in need of maintenance.

Furthermore, when groundwater levels decline below the top of the well screen, there is a potential to reduce well efficiency from air entrapment, mineral precipitation, biofouling, or

corrosion resulting in lower pumping rates and higher operating costs. Analysis of dynamic and static groundwater levels in active production wells show the following for WY2020:

- SVWD Orchard Well: Both dynamic and static groundwater levels are above the uppermost screen. Since this is a new well, the groundwater level record is still developing.
- SVWD Well #3B: Both the dynamic and static groundwater levels are above the top of the upper well screen. The difference between dynamic and static groundwater levels has remained fairly consistent.
- SVWD Well #10A and 11A: Both the dynamic and static groundwater levels are above the top of the upper well screen and have continued a recent increasing trend. Prior to 2018, both wells' dynamic levels were below the top of the uppermost screened interval. The difference between dynamic and static groundwater levels in both wells has remained fairly consistent.
- SVWD #11B: Dynamic groundwater levels are for the most part below the bottom of the upper well screen for most of WY2020, though the elevations at the well generally appear to be increasing. Static groundwater levels remain above the top of the upper well screen. The difference between dynamic and static groundwater levels has remained fairly consistent.

Appendix A contains hydrographs for all SVWD production wells showing dynamic and static groundwater levels, and screen depths.

## 4 GROUNDWATER QUALITY ASSESSMENT

---

SVWD promotes water quality protection by monitoring groundwater quality, and by operating water treatment facilities to ensure that water delivered to customers meets all drinking water standards. SVWD also reviews activities at environmental remediation sites and provides feedback to the regulatory agencies responsible for these sites.

The District annually prepares and makes available the “*Scotts Valley Water District Water Quality Report*” to keep customers informed on water quality issues. This report follows the content and format required by law and provides the public with detailed results of water quality testing, a description of the water source, answers to common questions about water quality, and other useful water quality information. The District Water Quality Reports are available at <http://svwd.org/your-water/water-quality>.

### 4.1 SVWD Groundwater Quality and Treatment

SVWD monitors water quality at the groundwater production wells for the constituents required by the Safe Drinking Water Act and under Title 22 of the California Code of Regulations. Groundwater is sampled from the SVWD production wells for inorganic minerals, trace metals, total dissolved solids (TDS), pH, volatile organic compounds (VOCs), and methyl-tert-butyl ether (MTBE). Results of water quality analysis are reported to the California Department of Drinking Water (CDDW).

#### 4.1.1 Groundwater Quality

Under the Safe Drinking Water Act, the USEPA and CDDW have set primary maximum contaminant levels (MCL) associated with public health risks as drinking water standards for various chemicals and constituents. These include industrial chemicals including VOCs and MTBE, and naturally occurring constituents such as arsenic. Secondary MCLs (SMCL) exist for constituents that are not defined as public health risks but require treatment for taste, odor, and other aesthetic issues. These include iron, manganese, sulfate, and TDS. MTBE has both an MCL and SMCL.

Table 7 provides a summary of the constituents of concern for untreated groundwater in the SVWD production wells. Historically, the VOCs tetrachloroethene (PCE), trichloroethylene (TCE) and cis-1,2-dichloroethylene (cis-1,2-DCE) along with MTBE have been detected in low concentrations in SVWD Well #9. In WY2020, SVWD Well #9 groundwater contained low detections of cis-1,2-DCE, TCE and MTBE which are below their respective MCLs.

Table 7. WY2020 Summary of Key Water Quality Constituents in Raw Groundwater

SVWD Well	VOCs	MTBE	Arsenic	Chromium- 6	Iron & Manganese	Sulfate	TDS
#3B	ND	ND	ND	ND	Above SMCL	Below SMCL	Below SMCL
Orchard Well	ND	ND	ND	ND	Above SMCL	Below SMCL	Below SMCL
#9	Below MCL	Below MCL	ND	ND	Above SMCL	Above SMCL	Below SMCL
#10A	ND	ND	ND	ND	Above SMCL	Below SMCL	Below SMCL
#11A	Below MCL	ND	Below MCL	ND	Above SMCL	Below SMCL	Below SMCL
#11B	ND	ND	At MCL	ND	Above SMCL	Below SMCL	Below SMCL

Notes: ND – not detected in any samples collected in WY2020; NS – Not Sampled  
 Above MCL or SMCL – At least one sample in WY2017 exceeded respective primary MCL or secondary MCL  
 Below MCL or SMCL – Constituent detected in levels below respective primary MCL or secondary MCL

Chlorobenzene is a VOC that continues to be detected in SVWD Well #11A at concentrations up to 0.68 micrograms per liter ( $\mu\text{g/L}$ ), consistent with historical levels, and well below the MCL of 70  $\mu\text{g/L}$ . For both SVWD Well #9 and Well #11A, the source of contaminants has not been conclusively defined but is considered to be related to one of the known environmental compliance sites in the vicinity.

Chromium-6 and arsenic are naturally-occurring constituents that can be present in SVWD groundwater wells. These constituents result from the natural dissolution of minerals within the aquifers. Of those, arsenic is the only chemical constituent in SVWD production wells where concentrations can be close to its primary MCL of 10  $\mu\text{g/L}$ . Arsenic levels in groundwater are coincidentally lowered to safe drinking water concentrations when the water is treated for iron and manganese. Arsenic concentrations in WY2020 that are above the laboratory detection limit of 1  $\mu\text{g/L}$  (Table 7) are:

- SVWD Well #11A ranged from non-detect to 3.1  $\mu\text{g/L}$ , and
- SVWD Well #11B ranged from 8.7 to 10  $\mu\text{g/L}$ .

In addition to chromium-6 and arsenic, there are other naturally-occurring constituents that are typical in groundwater pumped by the District. These constituents (iron, manganese, sulfate, and TDS) have SMCLs for aesthetic issues such as a taste, odor, or staining (Table 5) that require treatment, but do not represent public health concerns. There were no major changes in the

concentration or occurrence of these constituents in WY2020. One Well #3B sample during the water year had an iron spike up to 9.2 mg/l, however subsequent samples reverted to historical levels (around 0.5 mg/l). Temporary spikes in iron and manganese are common due to changing oxidation states during sampling.

#### 4.1.2 Groundwater Treatment

SVWD treats groundwater extracted from wells to reduce concentrations of certain constituents that are above or approaching MCLs or SMCLs. In addition, the District treats groundwater for hydrogen sulfide for aesthetic reasons, even though it is not a regulated compound. SVWD treats groundwater at four water treatment plants (WTPs) prior to distribution. Table 8 summarizes the four groundwater treatment plants used by SVWD. By applying the appropriate treatment technology, the District is able to deliver potable water that meets regulatory standards and is safe to drink.

Table 8. Summary of Water Treatment Processes Applied by SVWD

Water Treatment Plant	SVWD Wells	Aquifer	Chemicals of Concern	Treatment Type
Orchard Run	#3B Orchard Well	Butano & Lompico	Iron, manganese, and hydrogen sulfide	Air stripper, chlorination, dual media filtration, and sequestering agent
SVWD Well #9	#9	Monterey	Sulfate, VOCs, and hydrogen sulfide	Chlorination and granular activated carbon (GAC) filtration
SVWD Well #10	#10 #10A	Lompico	Iron, manganese, VOCs, and hydrogen sulfide	Air stripper, chlorination, dual media filtration, sequestering agent, and standby GAC filtration
El Pueblo	#11A #11B	Lompico	Iron, manganese, and arsenic	pH adjustment, chlorination, dual media filtration, and sequestering agent

## 4.2 Environmental Compliance Sites

To protect its potable water supplies and more effectively manage its groundwater basin, SVWD stays informed about local environmental compliance sites in the SVWD GWMA where groundwater quality has been impacted by pollution or chemical spills.

Figure 12 shows the locations of environmental sites with known groundwater impacts, and their relationship to SVWD groundwater production wells. These include the following sites:

- Watkins-Johnson Superfund site at 440 Kings Village Road (Cleanup Status: Open - Eligible for Closure)

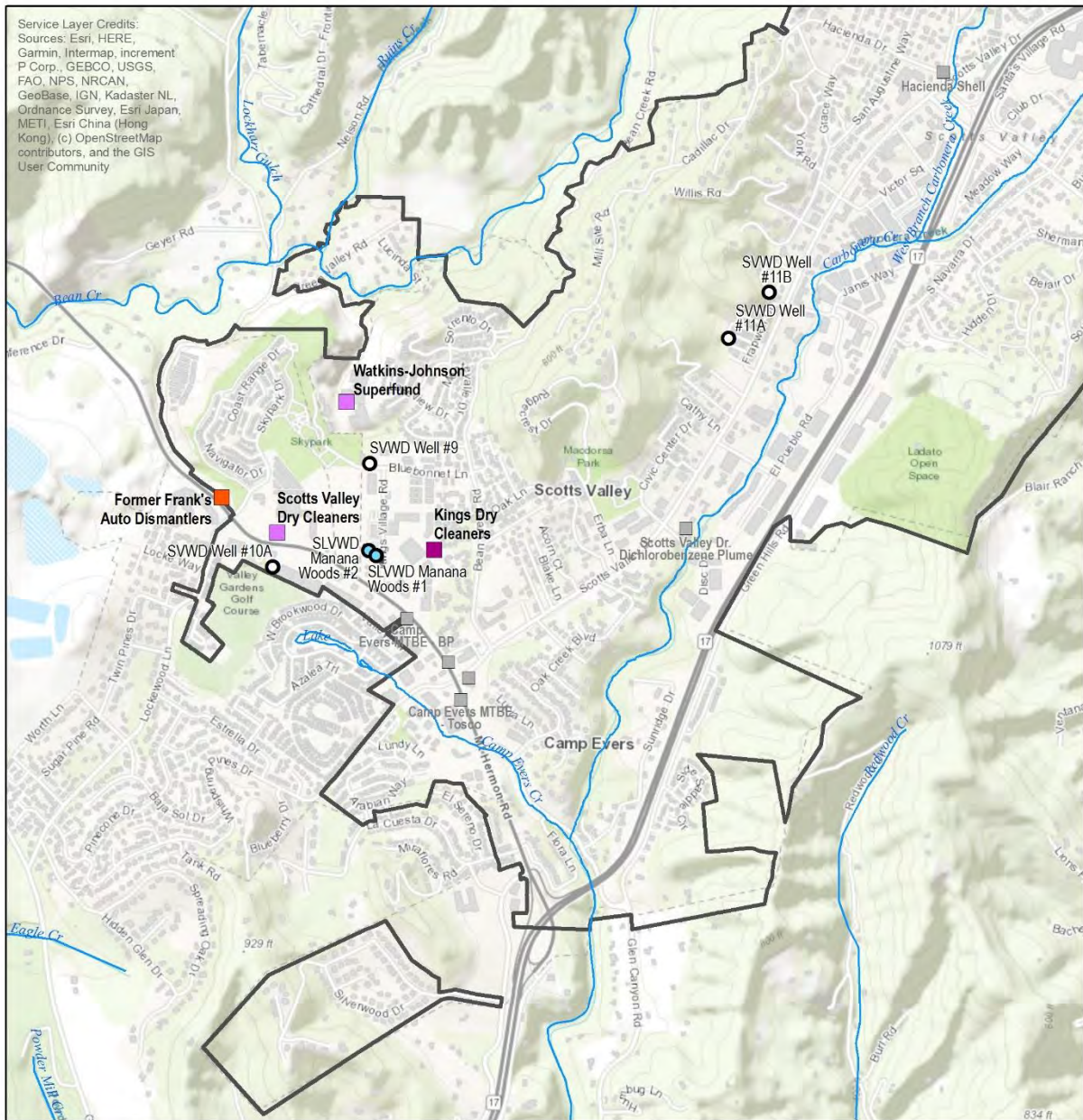
- Scotts Valley Dry Cleaners Site located at 272 Mount Hermon Road (Cleanup Status: Open - Site Assessment)
- Kings Dry Cleaners site at 222 Mount Hermon Road (Cleanup Status: Open - Verification Monitoring)

The following is an overview of the remaining active environmental compliance sites in the GWRA. More detailed information for these sites is available from the State Water Resources Control Board (SWRCB) GeoTracker website at <https://geotracker.waterboards.ca.gov/> and the Department of Toxic Substances Control (DTSC) Envirostor website at [www.envirostor.dtsc.ca.gov/public](http://www.envirostor.dtsc.ca.gov/public).

#### 4.2.1 Watkins-Johnson Superfund Site

The Watkins-Johnson site is located at 440 Kings Village Road in Scotts Valley (Figure 12). Watkins-Johnson is a former semiconductor manufacturer. The site is a Federal Superfund Site, and remediation activities are under the jurisdiction of USEPA Region 9. The site's current owner is 400 Kings Village, LLC). The site is of interest to SVWD because of its proximity to SVWD Well #9, which is located approximately 400 feet south of the Superfund site. Two contaminants in particular are present at this site: PCE and TCE, both with a drinking water MCL of 5 micrograms per liter ( $\mu\text{g/L}$ ). Groundwater quality sampling in 12 monitoring wells installed on site in August 2019 reported PCE concentrations ranging from non-detect to 78.8  $\mu\text{g/L}$  and TCE concentrations ranging from non-detect to 2.67  $\mu\text{g/L}$  (primary MCL for both these chemical constituents is 5  $\mu\text{g/L}$ ). Shallow groundwater extraction by the RA-2 remediation system was deactivated on July 5, 2016 and a draft Groundwater Remedial Action Completion Report (RACR) submitted to the USEPA on December 6, 2016.

The Watkins-Johnson Superfund site remediation is moving towards closure but still needs to complete the source control component of the remedial action to ensure protectiveness over the long-term. The site is currently designated as open-remediation for residential use due to existing soil gas plumes of benzene, TCE, PCE, arsenic and cadmium in soils. A draft Focused Feasibility Study proposing potential remediation alternatives including soil excavation was submitted to USEPA on behalf of the site's ownership in January 2019. There has been an ongoing request by SVWD to take over two Watkins Johnson monitoring wells located on City of Scotts Valley owned land. Due to the City's desire to sign off on these wells, it is looking unlikely these wells can be acquired by the District.



H:\Scotts\_Valley\_WD\2020\_Annual\_Report\GIS\AnnualRpt\_EnvComplianceFig10\_2018.mxd

## EXPLANATION

### Environmental Site Status

- Completed - Case Closed
- Open - Eligible for Closure
- Open - Remediation
- Open - Verification Monitoring
- Open - Site Assessment
- Scotts Valley Water District

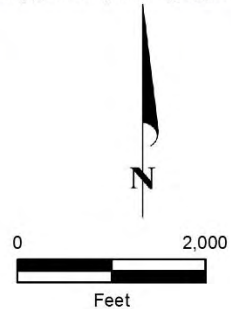


Figure 12. Locations of Environmental Compliance Sites

## 4.2.2 Scotts Valley Dry Cleaners

The Scotts Valley Dry Cleaners site is located at 272 Mount Hermon Road (Figure 12). Site clean-up is overseen by the Central Coast Regional Water Quality Control Board (RWQCB). This site is of interest to SVWD because of its proximity to SVWD Well #10A and Well #9. SVWD has installed a granulated activated carbon (GAC) treatment system at SVWD Well #10 WTP as a precautionary measure.

In WY2020, the Scotts Valley Dry Cleaners site continued operation of soil vapor extraction and air sparging systems in their current configuration. These are remediation systems for the unsaturated soils above the groundwater table, so no groundwater is extracted, only soil vapor. Their consultant is also recommending researching environmental data and past use history of the former nearby airport to assess potential source(s) for the elevated PCE and TCE concentrations detected in their distal sampling location. Groundwater remediation systems at this site have been shut down since 2015. There is a request to transfer some of Watkins Johnson monitoring wells to Scotts Valley Dry Cleaners (Pratt Company) to assume access and responsibility, although no agreement has been finalized yet.

## 4.2.3 Kings Dry Cleaners

The Kings Dry Cleaners site is located at 222 Mount Hermon Road (Figure 12). Site clean-up is overseen by the County of Santa Cruz Environmental Health Division (EHD). The site of the former dry-cleaning facility is now a retail ice cream parlor. The site is 1,300 feet upgradient from the nearest SVWD production well (SVWD #9), and approximately 690 feet away from SLVWD inactive Mañana Woods production wells.

No remedial actions had occurred at the Kings Cleaners site over the past several years. The County of Santa Cruz EHD took over the oversight responsibilities for this site from the RWQCB in April 2017. EHD issued the responsible party, Ow Properties, with a Notice of Intent to Open Remedial Action Case under the Voluntary Cleanup Program. This Notice of Intent is based on documents on the GeoTracker website that show that PCE and related chemicals may be present in subsurface soils vapor, and possibly subsurface soil, at concentrations above applicable health-based screening levels. EHD has also requested that a work plan for further investigation to characterize the chemical concentrations in soil, soil gas, and indoor air be developed with conclusions and recommendations regarding the conditions, potential risks to human health and the environment, and the remedial actions needed. In November 2019, a request to perform an 8-hour indoor sampling event and a vapor intrusion investigation were submitted to EHD and approved. The results of this investigation are not yet available on GeoTracker as of this report's writing.

#### 4.2.4 Inactive Sites

Inactive sites, which have been approved for site closure or have been found to pose little threat to groundwater, are listed below and also included on Figure 12. See previous annual reports for site descriptions or visit SWRCB's GeoTracker website for comprehensive information on these sites (<https://geotracker.waterboards.ca.gov/>).

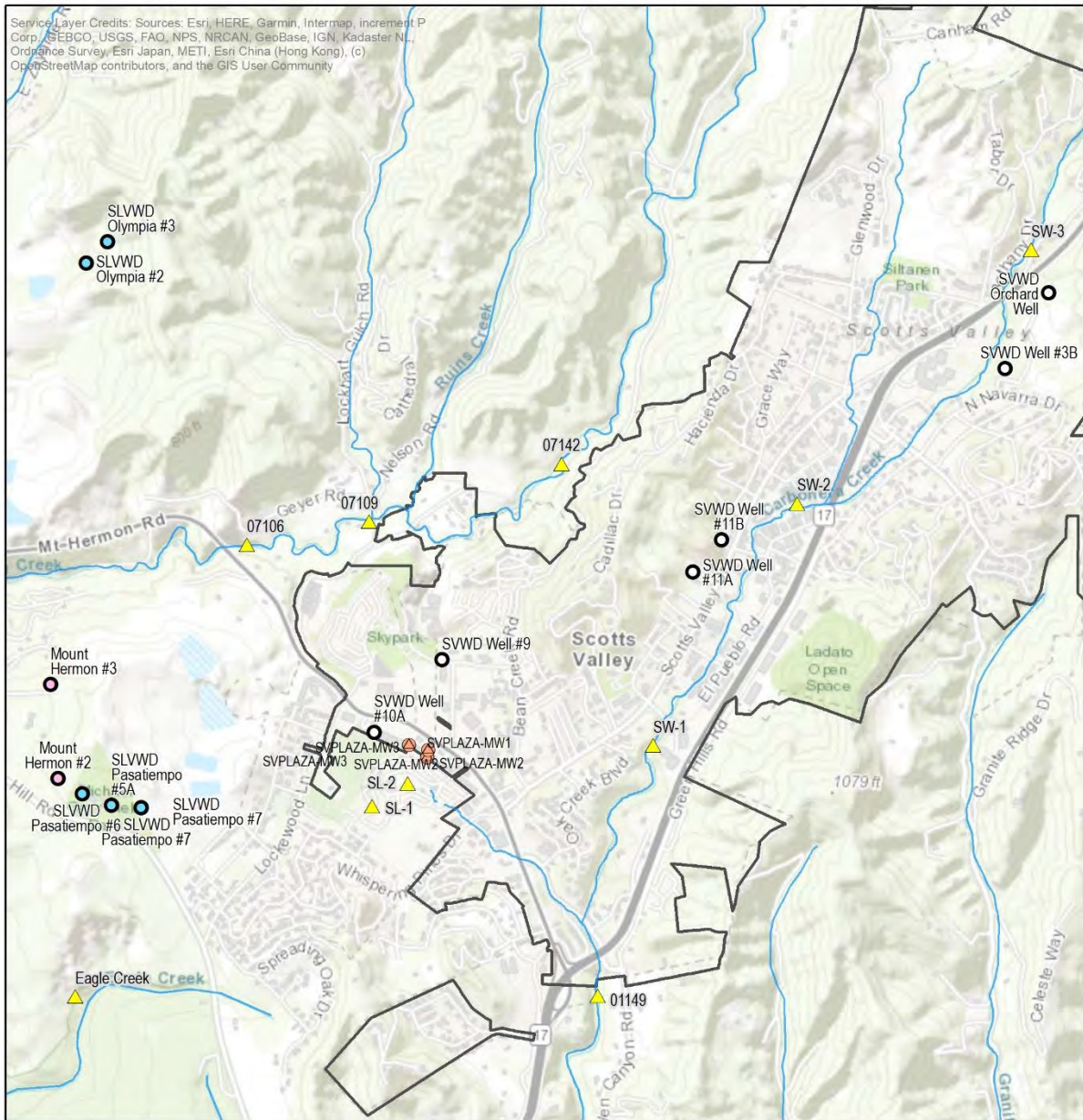
- Camp Evers combined site (remediation complete and case closed);
- Shaffer, Meisser & Rogers Property (Scotts Valley Drive Chlorobenzene Plume) [remediation complete and case closed];
- Hacienda Drive Shell Site (remediation complete and case closed); and
- Frank's Auto Dismantlers (case still open but not active).

### 4.3 Recycled Water Program

The Regional Water Quality Control Board permit for recycled water use includes a Monitoring and Reporting Program (MRP), which requires effluent monitoring and system performance monitoring. The MRP Order No. 01-067 details recycled water monitoring requirements, standard observations, distribution system inspections, and reporting requirements.

The presence of nitrate in recycled water has been noted in effluent samples, which is typical of treated wastewater. USEPA has established a primary drinking water MCL of 10 milligrams per liter (mg/L) for nitrate reported as nitrogen (nitrate as N). Nitrate in the City's recycled water during WY2020 ranged from 1.8 to 4.9 mg/L, with an average of 3.1 mg/L (City of Scotts Valley, 2020). Nitrogen removal efficiency at the plant ranged from 17% to 77%, with an average removal efficiency of 62%.

Although neither groundwater nor surface water monitoring is required by the permit, the District has performed this monitoring as part of meeting the basin management objective of monitoring changes in water quality in the past. Figure 13 shows the location of the monitoring features in relation to production wells. During WY2020, however, no samples were collected from surface water sites or groundwater wells. There has been no evidence of increases in nutrients or salts based on the sampling data conducted in previous years.



H:\Scotts\_Valley\_WD\2020\_Annual\_Report\GIS\AnnualRpt\_RWMP\_Monitoring\_2020.mxd

**EXPLANATION**

- Scotts Valley Water District
- RWMP Shallow Groundwater Monitoring Well
- ▲ RWMP Surface Water Monitoring Locations
- Production Well Location
  - SVWV
  - SLWV
  - Mount Hermon
- Streams

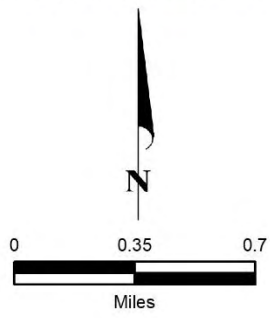


Figure 13. Recycled Water Management Plan (RWMP) Monitoring Locations

## 5 GROUNDWATER CONDITIONS

---

This section provides a summary of the data and analysis of groundwater conditions in the GWRA, including an assessment of changes in groundwater levels and aquifer storage.

### 5.1 Aquifer Conditions

#### 5.1.1 Santa Margarita Aquifer

The Santa Margarita aquifer comprises porous sandstone with widespread surface exposure throughout the Scotts Valley area. As part of the revised geological interpretations in this area, the Santa Margarita aquifer is considered to be about 30 to 50 feet thick over much of the Scotts Valley area and thickens to the north and west towards the Bean Creek and Pasatiempo subareas (Kennedy Jenks, 2015). Figure 3 shows a geologic cross-section illustrating the variable thickness of the Santa Margarita aquifer. The Santa Margarita aquifer is the shallowest primary aquifer in the SMGB, so it was developed first by both municipal and private water users. Being the shallowest aquifer, it is readily recharged by direct percolation of rainfall where it is exposed at ground surface. Where there are impervious surfaces over the Santa Margarita aquifer, percolation potential may be retained if runoff is collected and infiltrated in a local percolation location, such as the low impact development (LID) projects described in Section 7.1.6,

Figure 14 provides groundwater elevation hydrographs for three representative Santa Margarita aquifer monitoring wells from different locations across the GWRA. The three well locations are shown on Figure 4. SVWD monitoring well TW-18 is measured continuously with an electronic data transducer. Overall, the groundwater elevations in the Santa Margarita aquifer vary by a range of 5 to 30 feet over the period of record, with fluctuations corresponding largely to climatic conditions. In general, groundwater levels in the Santa Margarita aquifer have remained relatively stable for the past 30 years. Note that Figure 14 and subsequent aquifer specific hydrographs have a vertical scale of 300 feet to show the groundwater elevation variations of all the aquifers at the same scale.

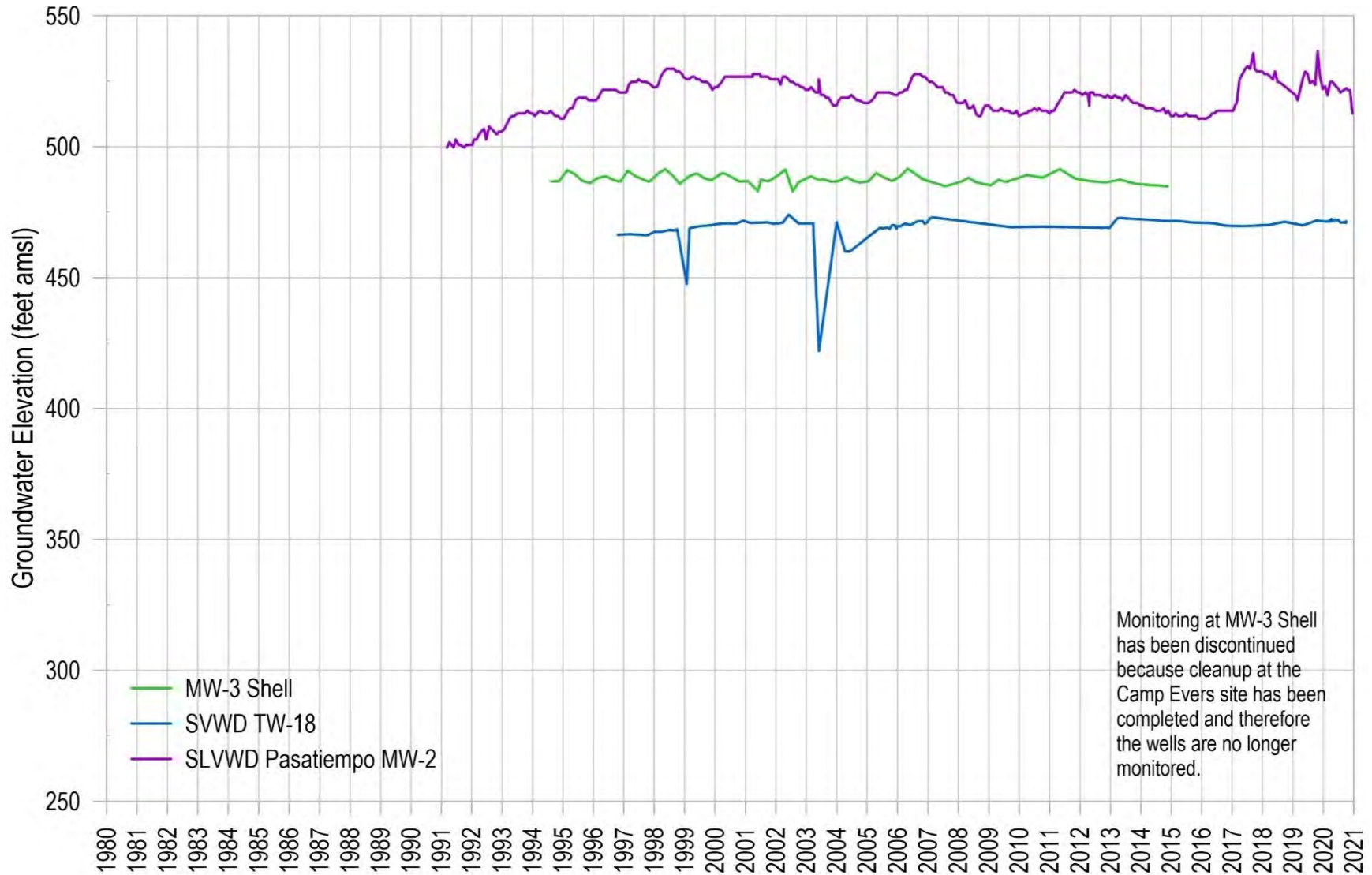


Figure 14. Groundwater Hydrographs for the Santa Margarita Aquifer

Groundwater levels for SLVWD's Pasatiempo MW-2 and SVWD's TW-18 monitoring well on Figure 14 show how different Santa Margarita aquifer locations respond differently to rainfall and pumping. SVWD's TW-18 monitoring well is located over two miles away from municipal wells that historically pumped from the Santa Margarita aquifer. Because of this distance, groundwater levels in the well do not show seasonal fluctuations related to pumping. The groundwater level trend over time has remained very stable. This suggests that the Santa Margarita aquifer in the northern portion of the District has not had much change in groundwater in storage for over ten years. Years when there has been above-average rainfall (1995-1998, 2005-2006, 2010-2011, 2017, 2019), there are no noticeable groundwater level increases in this well. This may indicate that groundwater levels in this part of the District are in equilibrium and that recharge from above-average rainfall results in increased natural discharge and not a change in storage with associated increase in groundwater levels.

The southern portion of the District, where SLVWD's Pasatiempo MW-2 monitoring well is located, is an area where there has historically been more Santa Margarita aquifer pumping by SVWD and SLVWD. Currently neither of these water districts pump from the Santa Margarita aquifer within the GWRA. The well's hydrograph on Figure 14 shows both smaller seasonal fluctuations, and larger fluctuations corresponding to periods of above-average rainfall (1995-1998, 2005-2006, 2010-2011, 2017, and 2019). Of note, groundwater elevations increased 16 feet in June of WY2017. This increase occurred primarily because of record rainfall in WY2017, but also coincides with the year SLVWD stopped pumping their wells screened in the Santa Margarita aquifer. While groundwater elevations in the southern portion of Scotts Valley fluctuate seasonally and in response to climactic changes, the reduction in Santa Margarita aquifer pumping appears to have increased groundwater elevations in this area. The peak groundwater levels in June indicate that it takes several months for direct rainfall to percolate down to the water table and recharge the Santa Margarita aquifer.

Figure 15 presents a groundwater elevation map of the Santa Margarita aquifer for September 2020. In general, groundwater in the Santa Margarita aquifer flows from higher elevations, where the Santa Margarita aquifer is exposed at the surface and direct recharge occurs, toward lower elevations where groundwater is discharged at springs or in creeks. The highest Santa Margarita aquifer groundwater elevations in the GWRA are found in the uplands south and northeast of Scotts Valley. The lowest groundwater elevations are found along Bean Creek, where groundwater discharges into the creek.

Portions of the Santa Margarita aquifer are unsaturated. As shown on Figure 3 and Figure 15, there are areas where the Lompico aquifer directly underlies the Santa Margarita aquifer. Declining groundwater levels in the Lompico aquifer have caused the Santa Margarita aquifer in these areas to become either unsaturated or to have lowered groundwater levels. Percolating

rainfall and surface water in this area passes through the Santa Margarita aquifer as groundwater recharge to the underlying Lompico aquifer.

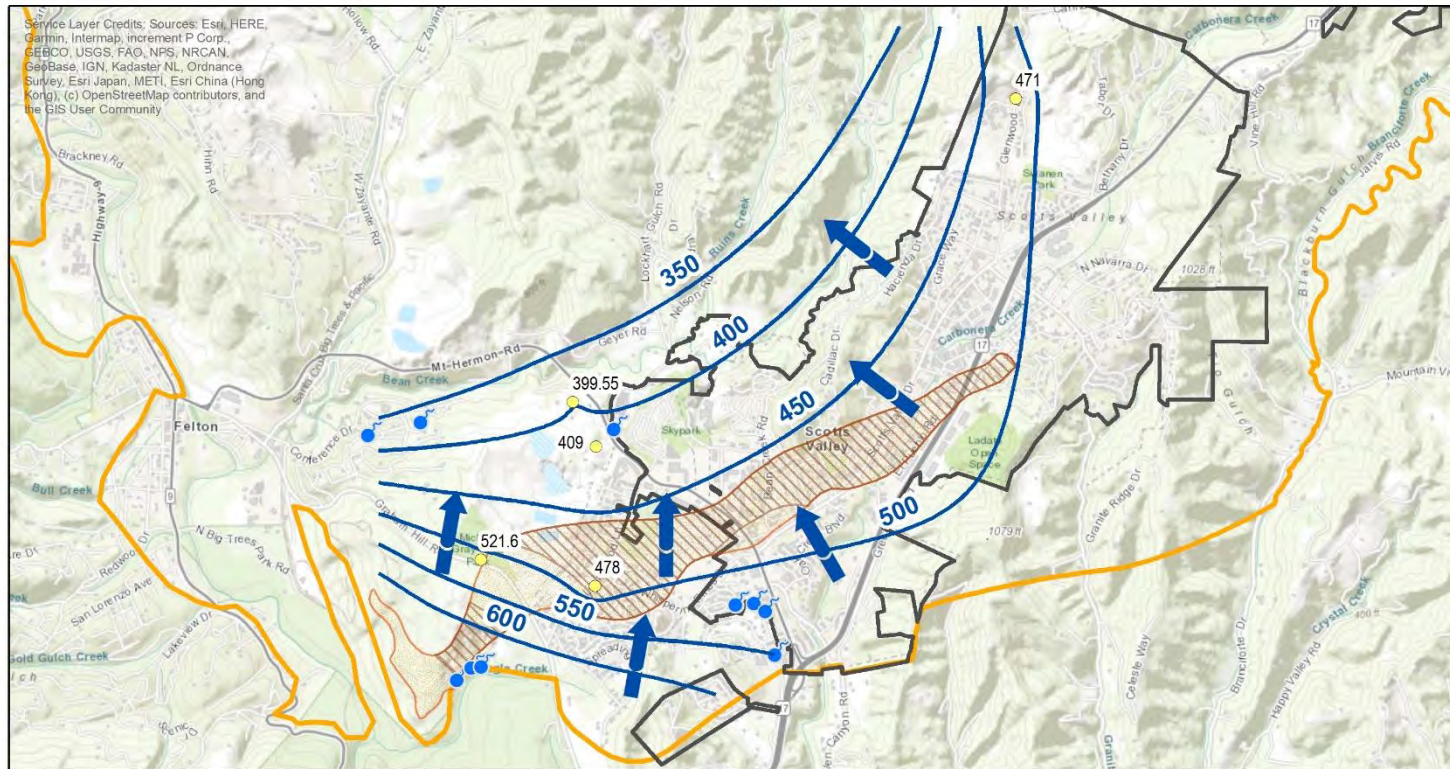
### 5.1.2 Monterey Formation

The Monterey formation is composed primarily of mudstone, shale, and siltstone, forming a regional aquitard that separates the Santa Margarita and Lompico aquifers. However, due to the gradational geologic transition from the underlying Lompico sandstone, the lower Monterey formation contains several sandstone interbeds that can locally produce groundwater for smaller municipal and private wells.

As shown on Figure 16, SVWD Well #9 experienced over 200 feet of groundwater level decline during the 1980's and early 1990's that diminished its water supply potential significantly. Following recovery in the later-1990's, a smaller groundwater level decline occurred over WY2013 and WY2014, likely in response to increased pumping and reduced recharge in the Monterey formation during this time of drought (Table 1). Groundwater levels in SVWD Well #9 have risen slowly through WY2020 but are still about 150 feet below elevations prior to 1980.

Similarities in the groundwater elevation trends of SVWD Well #9 and wells completed in the Lompico aquifer indicate hydrogeologic connectivity between the two formations (Figure 17). In the 1980's, when groundwater levels in the Lompico aquifer were higher, groundwater in the Lompico may have been recharging the sandier layers in the lower Monterey formation where SVWD Well #9 is completed. After the Lompico aquifer groundwater levels declined in the mid-1980s, this recharge was greatly diminished such that SVWD Well #9 was no longer able to sustain its earlier pumping rates. Groundwater elevations in the Monterey formation are currently stable to slightly increasing. Notably, elevations at SVWD #9 have been steadily increasing since 2014.

The Monterey formation is no longer used to produce water for SVWD. Because of limited wells completed within the Monterey formation with available groundwater level data, a groundwater elevation contour map cannot be constructed for the aquifer.



H:\Scotts\_Valley\_WD\2020\_Annual\_Report\GIS\SantaMargarita\_Contours2020.mxd

**EXPLANATION**

- Santa Margarita Groundwater Well Location with Elevation, feet amsl
- Santa Margarita 2020 Groundwater Elevation Contour, feet amsl
- Scotts Valley Water District
- Santa Margarita Groundwater Basin
- Springs
- Inferred Unsaturated Area in 2018
- Location of Direct Contact between the Santa Margarita Sandstone and the Lompico Sandstone

➔ Groundwater Flow Direction

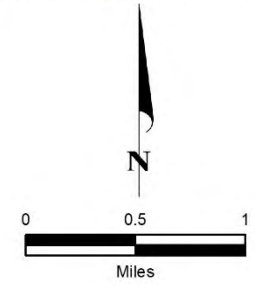


Figure 15. Santa Margarita Aquifer Groundwater Elevation Contour Map, September 2020

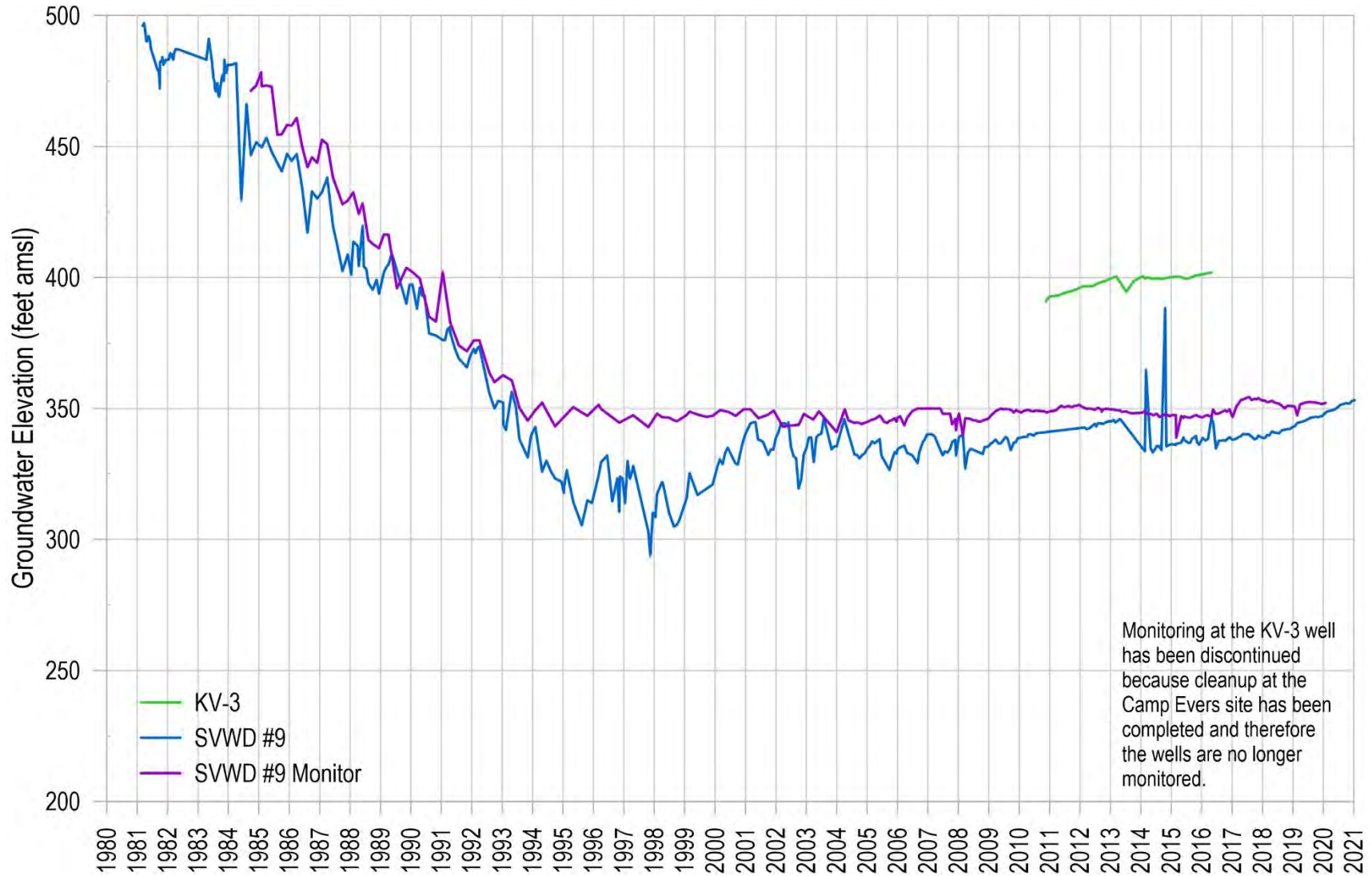


Figure 16. Groundwater Hydrographs for the Monterey Aquifer

### 5.1.3 Lompico Aquifer

The Lompico aquifer is typically a 300 to 400 feet thick medium-grained sandstone that becomes thinner and more fine-grained to the north and east across the SMGB (Clark, 1981, Brabb *et al.*, 1997). The Lompico sandstone is found throughout most of the Basin, though it only outcrops along the basin margins and in a few places within the San Lorenzo River valley. Figure 3 shows a geologic cross-section illustrating the complex character of the Lompico aquifer across the area.

The Lompico aquifer is the primary water producing aquifer in the SMGB and provides a large percentage of the municipal water supply, especially in the Scotts Valley area. In WY2020, 64% of GWRAs groundwater pumped was from the Lompico aquifer (Table 4). Reliance on groundwater supply from the Lompico aquifer has contributed to historical Lompico aquifer groundwater level declines.

Figure 17 provides groundwater elevation hydrographs for six representative Lompico aquifer wells from different locations across the GWRAs. The well locations are shown on Figure 4. SVWD monitoring wells TW-19 and SVWD AB303 MW-2 (Skate Park) are measured continuously with electronic data transducers (Appendix B includes more detailed hydrographs of these wells).

As evident on Figure 17, Lompico aquifer groundwater levels declined by 150 to 200 feet relative to pre-pumping levels across the GWRAs. The greatest decline in groundwater levels occurred from 1984 to 1994. From 1995 to 1999, groundwater levels stabilized or increased in some areas. From 1999 to 2004, groundwater levels declined another 50 feet. Since 2005, groundwater levels have fluctuated within a more narrow range; although, groundwater levels in Pasatiempo MW-1 and SVWD #10 continued to decline up to 20 to 30 feet until 2010; thereafter groundwater levels have fluctuated within a narrow range like the other wells on the hydrograph. From around 2015 through 2020 several of the wells on Figure 17 show increasing groundwater levels, with up to roughly 40 feet of rise measured.

Figure 18 presents a groundwater elevation map of the Lompico aquifer for September 2020. Lompico aquifer wells are generally limited to the southern portion of the basin due to the great depth of the Lompico aquifer in the center of the Basin. The Lompico aquifer contours for this annual report are different to previous years' contours. A change has been made to not only rely on measured groundwater level data, but to also incorporate groundwater model simulated contours to provide more regional context on groundwater elevations and flow directions in those areas where there are no measured groundwater levels, e.g., the area just north of Bean Creek. The general pattern of contours on Figure 18 indicates flow from north Scotts Valley

towards the south, and flow from the SLVWD Pasatiempo wellfield and Camp Evers flowing northwards under Bean Creek. There are also localized pumping depressions around the SVWD Well #3B and Orchard well, around SVWD Wells #11A and #11B, and around the SLVWD Pasatiempo and Mount Hermon Association wellfields (Figure 18).

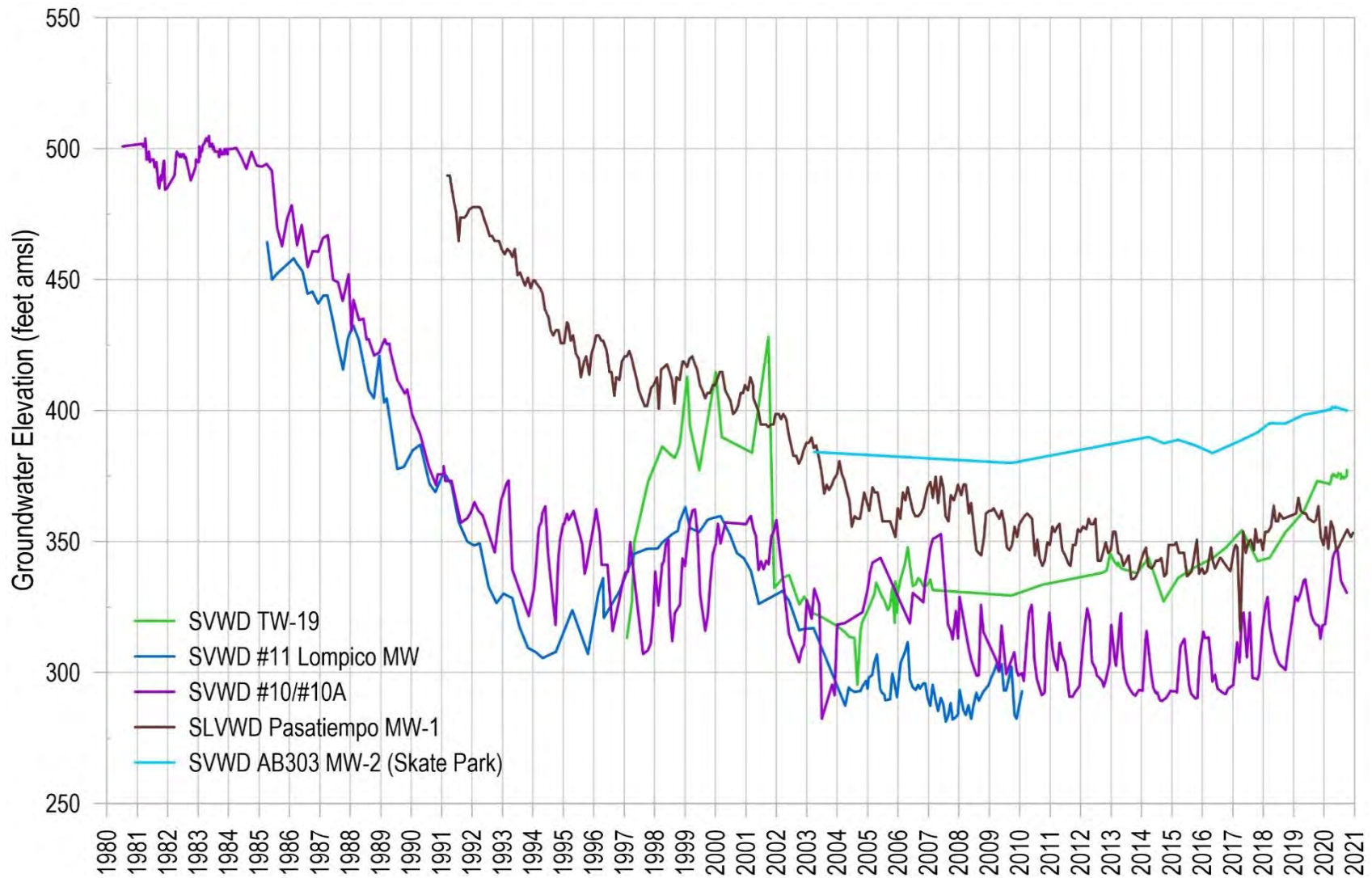
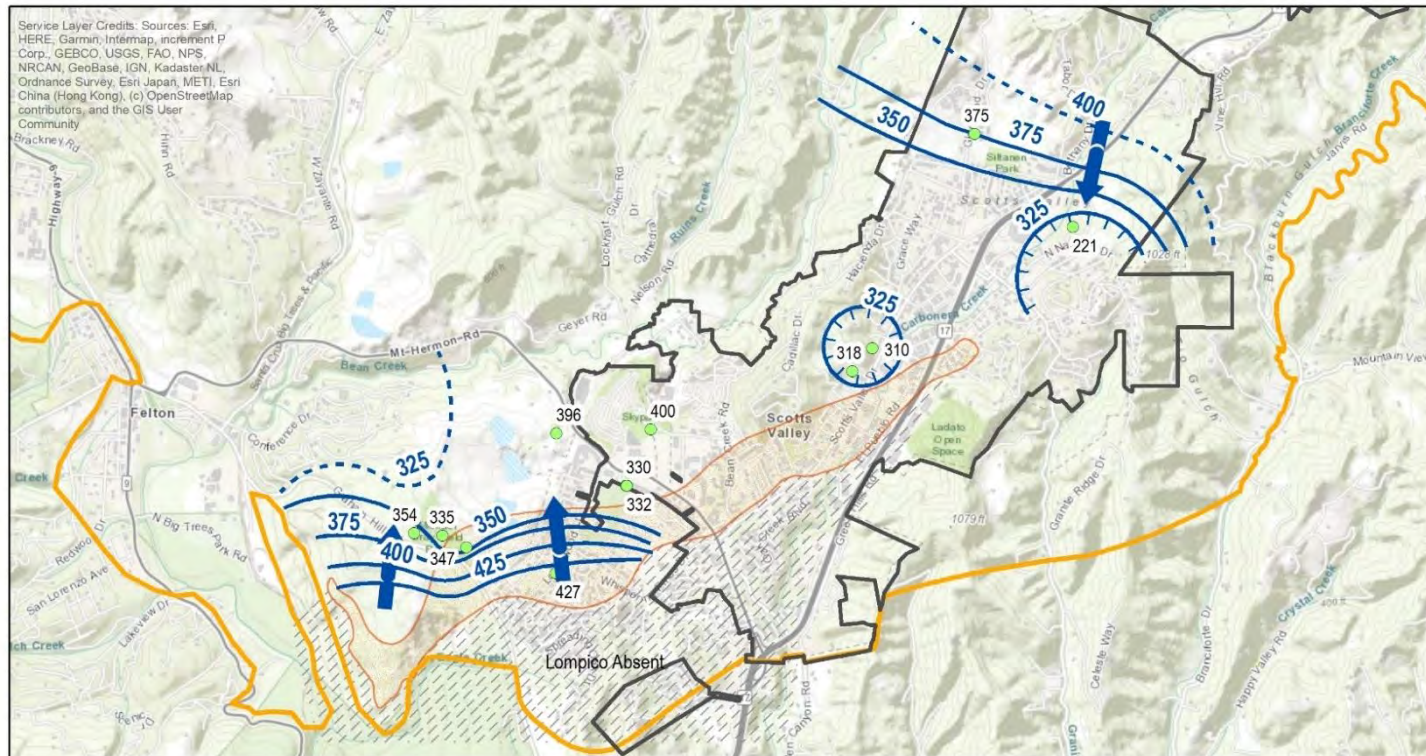


Figure 17. Groundwater Hydrographs for the Lompico Aquifer



H:\Scotts\_Valley\_WD\2020\_Annual\_Report\GIS\Lompico\_Contours2020V2.mxd

**EXPLANATION**

- Santa Margarita Groundwater Basin
- Scotts Valley Water District
- Lompico Groundwater Well Location with Elevation, feet amsl
- 2020 Lompico Groundwater Elevation Contours, feet amsl
- Groundwater Elevation Contour
- Groundwater Depression Contour
- Uncertain Contour
- Lompico Absent
- Location of Direct Contact between the Santa Margarita Sandstone and the Lompico Sandstone
- Groundwater Flow Direction

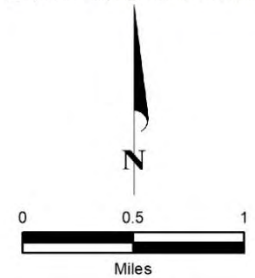


Figure 18. Lompico Aquifer Groundwater Elevation Contour Map, September 2020

#### 5.1.4 Butano Aquifer

The Butano aquifer is a significant water-producing aquifer in the SMGB for SVWD, with approximately 40% of its potable supply pumped from this aquifer in WY2020. The Butano aquifer is a deep, thick sedimentary unit that consists largely of sandstone with interbeds of mudstone, shale, and siltstone. It is geologically complex and typically occurs at depths greater than 1,000 feet under much of the SMGB. The Butano aquifer forms a wedge along the northern portion of the SMGB (Figure 3). Its only surface outcrop in the Basin is along the northern SMGB boundary roughly parallel to the Zayante-Vergeles Fault.

During the first few years of SVWD pumping from this aquifer (WY1993 to WY1995), groundwater levels in SVWD Well #7A declined nearly 200 feet relative to pre-pumping levels (Figure 19). However, since SVWD Well #7A was completed in both the Lompico and Butano aquifers, it is unclear whether the decline reflects conditions in the Butano aquifer or the observed decreases in the Lompico aquifer (this well has since been destroyed and replaced with the Orchard Well). From 1996 to 2006, static groundwater levels at SVWD Well #3B and #7A fluctuated seasonally within an elevation range of 200 to 300 feet above mean sea level (amsl). With decreased pumping after 2006, groundwater levels have increased over 50 feet and have remained fairly stable since 2010. The seasonal range in groundwater levels is typically 50 feet but can be as much as 100 feet.

Due to its great depth, there are currently only two dedicated monitoring wells in the Butano aquifer. The Canham well is located 0.9-mile northeast of the nearest District wells, SVWD Wells #3B and Orchard Well and the SVWD Stonewood Well which is located in the very north of the District (Figure 3). Groundwater levels for the SVWD Canham monitoring well are plotted on Figure 19. Groundwater levels in both wells are measured continuously with electronic data transducers. Their groundwater levels are generally stable.

There is one other monitoring well, SVWD Well #15 Monitor Well located 500 feet from the SVWD's Well #3B. This monitoring well is partially screened the Butano aquifer and partially in the Lompico aquifer. It is equipped with an electronic data transducer that continuously measures groundwater levels. The hydrograph for this well is not included on Figure 19 because its levels fluctuate strongly in response to pumping at nearby SVWD Well #3B and Orchard Well, and adding it to the hydrograph would obscure the other data. Its hydrograph is included in Appendix B. The groundwater elevation data for SVWD Well #15 Monitor Well shows about a 100-foot decline when SVWD Well #3B is pumping, and about a 20-foot decline when SVWD Well #7A/Orchard Well is pumping. However, over its period of record, including during the WY2012 through WY2015 drought, groundwater level response to pumping remained consistent with no

indication of a decline in groundwater levels over the drought or any other overall trend. Elevations in WY2020 have continued this trend, with minimal change from recent years.

Figure 20 presents a groundwater elevation map of the Butano aquifer for WY2020. Groundwater flow is mostly north to south, from the Butano aquifer's recharge area at the Basin's northern boundary towards the actively pumping SVWD Well #3B and Orchard Well.

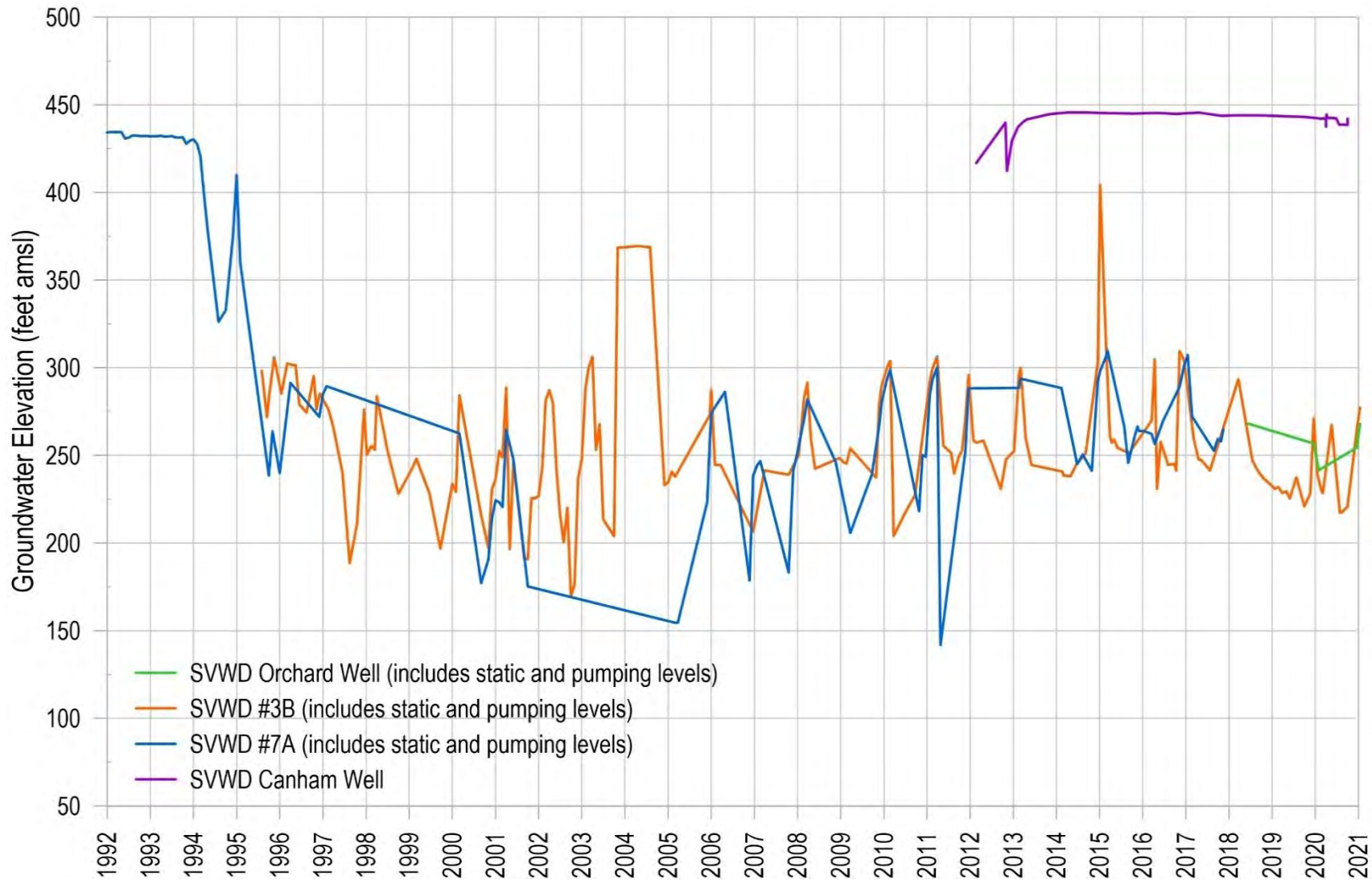
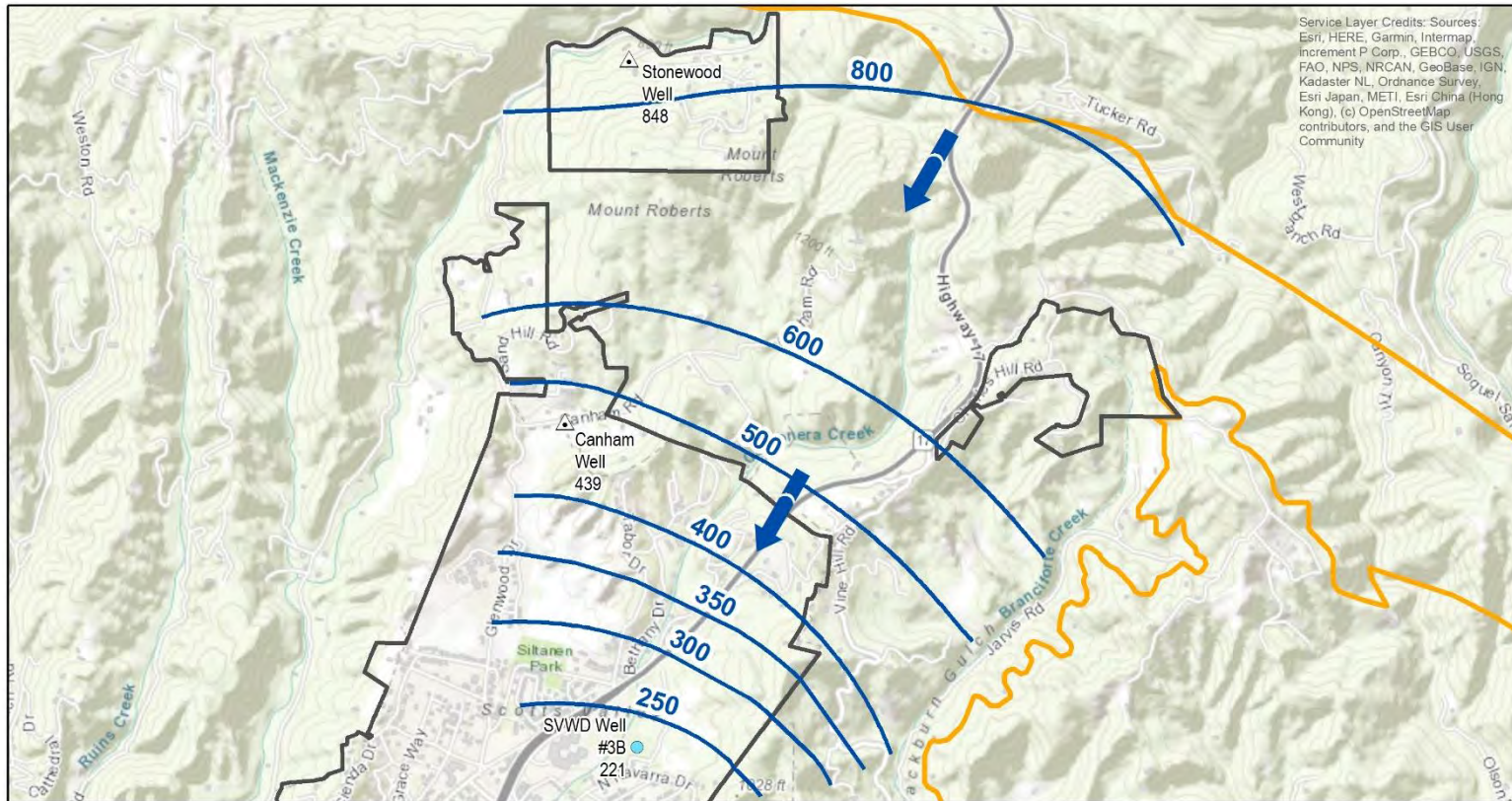


Figure 19. Groundwater Hydrographs for the Butano Aquifer



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

H:\Scotts\_Valley\_WD\2020\_Annual\_Report\GIS\Butano\_Contours2020.mxd

**EXPLANATION**

- Butano 2020 Groundwater Elevation Contour, feet amsl
- Scotts Valley Water District
- Santa Margarita Groundwater Basin
- Butano Monitoring Well Location with Elevation, feet amsl
- Butano Production Well Location with Elevation, feet amsl
- Groundwater Flow Direction

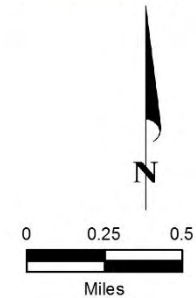


Figure 20. Butano Aquifer Groundwater Elevation Contour Map, September 2020

## 5.2 Aquifer Storage Analysis

Aquifer storage is a measure of the volume of groundwater present in the aquifer. The change in aquifer storage measures the increase or decrease in the volume of groundwater in the aquifer resulting from changes in groundwater levels, primarily in response to variations in annual precipitation and groundwater pumping.

Because of the geologic complexity of the SMGB, the SMGB groundwater model provides a quantitative tool to evaluate the changes in groundwater conditions over time. The SMGB groundwater model has been updated in 2020 and 2021 as part of developing the SMGWA's GSP. The model is calibrated from WY1985 through WY2018 and now encompasses the entire Santa Margarita Basin. The area used for calculation of aquifer storage within the GWRA has also changed slightly and therefore aquifer storage results presented here are generally consistent from those presented in previous annual reports, but since the area of the updated model is slightly different to the older model, volumes are not exactly reproducible from one model to the next.

The results of the model-based calculations for change in aquifer storage since WY1985 are shown on Figure 21. Table 8 provides a summary of the long-term change in aquifer storage per aquifer as calculated by the updated SMGB GSP model. Since the last annual report did not include the change in storage estimates for WY2019, this report includes estimates for both WY2019 and WY2020. Groundwater in storage increased by 1,645 acre-feet in WY2019, driven by average precipitation following a critically dry year. This was one of the largest increases in the historical record, surpassed only by WY2017's record increase of groundwater in storage (Figure 21). Low rainfall in WY2020 resulted in a loss of groundwater in storage of 890 acre-feet. These storage losses are distributed across the Santa Margarita, Lompico, and Butano Aquifers, with the largest losses occurring the Santa Margarita aquifer (Table 9). Below average rainfall reduces recharge to all aquifer but most noticeably to the Santa Margarita aquifer.

Groundwater storage in the Basin is responsive to both changes in climate and groundwater use. Model results show that during the drought years of WY2012 through WY2015, the cumulative decline in aquifer storage was about 4,800 acre-feet. This drought-related storage decline was much less than the storage decline experienced during the WY1985 to WY1992 drought, which resulted in a reduction of groundwater in storage of about 14,600 acre-feet. The greater decline occurred, in part, because average pumping was 290 acre-feet per year more than it was during the WY2012-2015 drought, illustrating the Basin's sensitivity to changes in groundwater use.

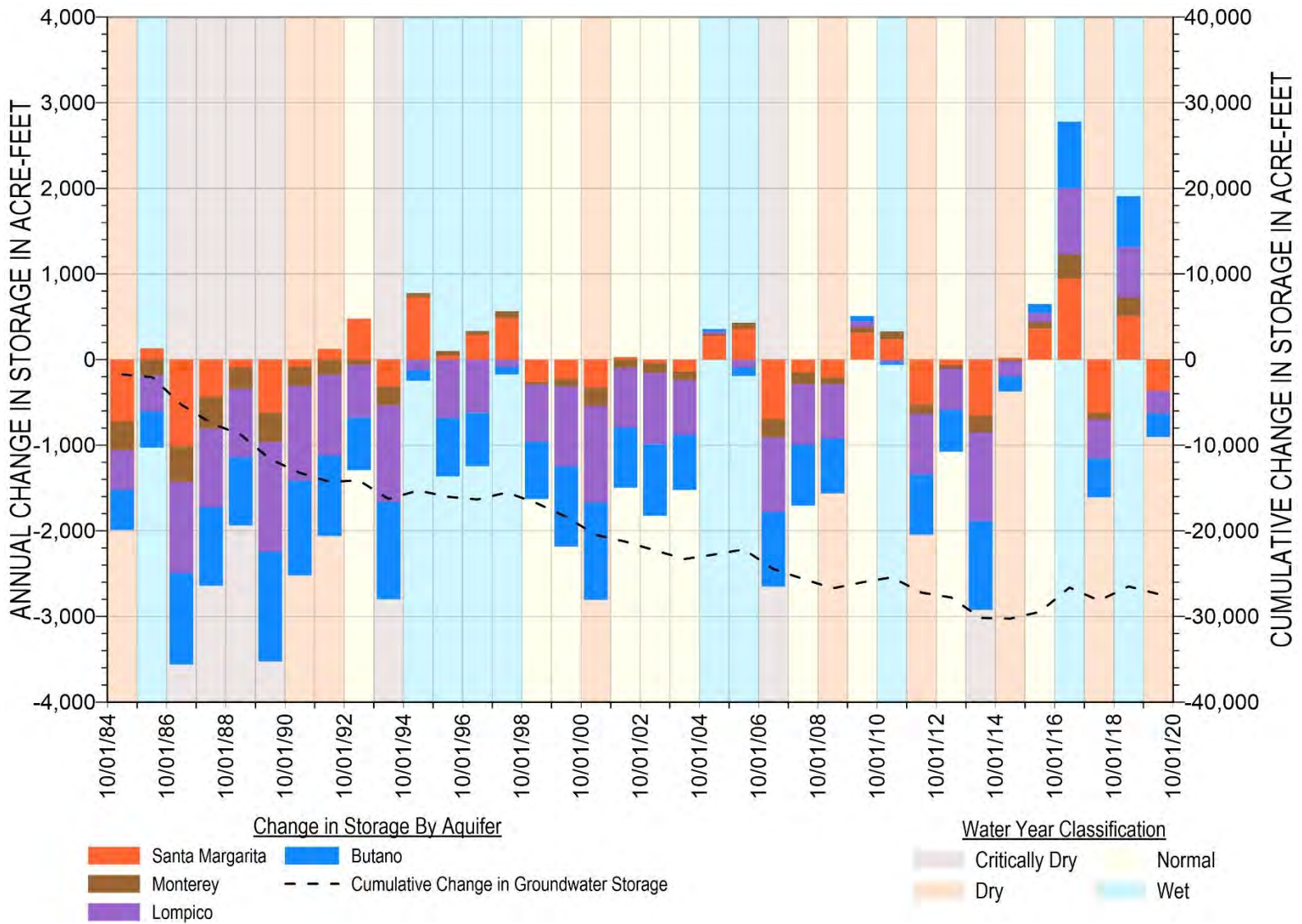


Figure 21. Historical Change in Aquifer Storage for Groundwater Reporting Area

The cumulative storage change line on Figure 21 falls steadily from WY1985 to around 2004, illustrating groundwater overuse and the effects of an eight-year drought. After 2004, cumulative loss of stored groundwater begins to reduce in response to improved groundwater management strategies. Since the end of the recent drought in 2015/2016, cumulative change in storage in the GWRA has increased slightly. It is expected that projects and management actions planned as part of the upcoming GSP will help recover lowered groundwater levels in the south Scotts Valley area and increase stored groundwater in the GWRA.

Table 9. Model-Simulated Change in Aquifer Storage for the GWRA by Aquifer

Aquifer	WY1985 through WY1992	WY2005 through WY2011	WY2012 through WY2015	WY 2016	WY 2017	WY 2018	WY 2019	WY 2020
	<b>Annual Average Change in Aquifer Storage (acre-feet)</b>							
Santa Margarita	-340	20	-310	360	950	-620	510	-360
Monterey	-290	-30	-90	80	280	-80	210	0
Lompico	-870	-320	-600	110	780	-450	590	-270
Butano	-280	20	-210	250	780	-370	330	-260
<b>Total</b>	<b>-1,780</b>	<b>-310</b>	<b>-1,210</b>	<b>790</b>	<b>2,780</b>	<b>-1,520</b>	<b>1,650</b>	<b>-890</b>

Units in acre-feet

## 6 GROUNDWATER MANAGEMENT PROGRAMS

---

SVWD has actively managed groundwater in the SVWD GWMA since the early 1980s in an effort to increase water supply reliability and to protect local water supply sources. This section provides a summary of these programs conducted by the District to meet the BMOs.

### 6.1 Groundwater Augmentation Projects

One of the key BMOs is to implement groundwater augmentation projects. Current programs focus on water use efficiency, recycled water use and conjunctive use projects.

#### 6.1.1 Water Use Efficiency Program

Water use efficiency reduces the overall demand for groundwater, and thus helps to sustain groundwater levels and long-term groundwater extraction. In recent years, SVWD has implemented numerous policies and programs to encourage water use efficiency among customers through coordinating public outreach activities, issuing monetary rebates to customers, and implementing best water use efficiency management practices. A more detailed description of SVWD's water use efficiency activities can be found on the water use efficiency section of the District's website at: <http://www.svwd.org/water-use-efficiency>.

Of particular note since the last annual report is the District's focus on water loss control. In 2016, District staff used AWWA M36 software to calculate an updated Water Audit Validity Score. The District received a validated score of 51 out of 100 in 2016, 50 out of 100 in 2017, and 60 out of 100 in 2018. Priority areas that are identified for attention included meter data from District sources, estimation of variable production cost, and customer metering accuracies. Table 10 provides a summary of estimated water loss from WY2010 through WY2015. It should be noted that the percentages of water loss in Table 10 are slightly overestimated because the groundwater production used in the calculation is groundwater pumped and not production. Further complicating a comparison of actual production with end use is that consumption is read on a sliding bi-monthly scale, The District defines production as groundwater pumped less water treatment process water, i.e., water produced for transmission to customers.

Table 10. Unaccounted-for Water Estimates WY2017-WY2020

	WY2017	WY2018	WY2019	WY2020
Groundwater Production*	1,164	1,130	1,113	1,135
Potable Water Delivered	994	1,046	1,000	1,017
Percent Water Loss (Unaccounted Water)	14.5%	7.4%	10.1%	10.4%

Units in acre-feet; \* production = groundwater pumping less treatment process water

Full system leak detection survey was completed in 2015. The report from the consultant, M.E. Simpson, indicated only a few minor distribution system leaks that were repaired immediately. In addition to system leaks, the District has also operated a leak detection program for customers since 1996. Customers who have spikes in water consumption are sent a courtesy “leak letter” informing them of an increase in water usage and suggesting that there may be a leak at their property. Customers who encounter unusually high water use volumes may be eligible for an adjustment on their water bill. In February 2016, the Leak Adjustment Policy was changed to a Leak Adjustment Program, simplifying the process and increasing staff efficiency for implementation.

A significant percentage of District unaccounted water could potentially be the result of older meters that are under-reporting. The District began a multi-year meter change out program in 2016 coupled with an Automated Metering Infrastructure (AMI) system-wide deployment. The District retained Triton AMI to determine which automated metering system would work best and selected Badger Beacon coupled with WaterSmart customer engagement portal. The meter change out project is anticipated to be completed by Spring 2021. AMI allows for every 15-minute recording of consumption data that is uploaded daily and stored in a cloud-based database. The information can be accessed by the District and customers to gain a better understanding of their water use patterns and to provide alerts about unusual fluctuations in water use.

### 6.1.2 Recycled Water Program

Recycled water is used in-lieu of groundwater for permitted non-potable uses, mainly for landscape irrigation. This augments the water supply and helps to meet water use efficiency goals. Since all of the recycled water use sites are located within the SMGB, the entire recycled water usage represents an equivalent reduction in groundwater pumping. Groundwater not pumped from the basin is assumed to be available for future beneficial use. Recycled water deliveries by SVWD historically and in WY2020 is reported in Section 4.2.2.

The Recycled Water Program is a cooperative effort between SVWD and the City of Scotts Valley. Recycled water is produced at the City of Scotts Valley Tertiary Treatment Plant, where it undergoes treatment including nitrate removal, ultra-violet disinfection, and chlorination. Recycled water is then distributed by SVWD to customers through a designated pipeline system. The City of Scotts Valley has passed an ordinance mandating use of recycled water for new construction where economically feasible.

From August 2015 through 2018, SVWD operated a Recycled Water Fill Station located on Kings Village Road from May to October. All District customers and City residents were eligible to receive up to 250 gallons of free recycled water per day for permitted uses.

In April 2016, the City of Scotts Valley and Pasatiempo Golf Club reached an agreement for the City to provide treated wastewater to the golf course for irrigation. This allows Pasatiempo Golf Club to reduce its reliance on potable water from the City of Santa Cruz during peak-use months when irrigation demand is high. In support of this regional effort, SVWD released 10% of its total recycled water allocation in exchange for compensation that can be applied toward funding future projects. The District did not have a current identified use for the amount of recycled water that it supplied to the golf course.

### 6.1.3 Regional Intertie Project

The District led a grant application effort to obtain Proposition 50 Water Security funding from the CDDW for constructing emergency intertie pipelines and pump stations between adjacent water systems for sharing water during a water emergency. The grant provided 44% funding for the project. Construction was completed in Spring 2016. For the GWRA, the interties of interest include the following connections:

- SVWD and the SLVWD's southern portion of its North System (previously called the South System),
- Northern and southern portions of the SLVWD North System, and
- SLVWD and the Mount Hermon Association.

The construction of the intertie linking the SLVWD's northern and southern portion of the North System provides a means for using surface water in place of pumping groundwater in the GWRA.

The intertie was activated in June 2020 due to a failure in SVWD Well #11B. The intertie provided 2.9 million gallons over eleven days.

### 6.1.4 Regional Water Supply MOA

The District is party to a Memorandum of Agreement (MOA) with SLVWD, City of Santa Cruz and County of Santa Cruz to explore and evaluate potential projects for the conjunctive use of surface and groundwater resources in the Santa Margarita basin and San Lorenzo River watershed.

### 6.1.5 Santa Margarita Groundwater Basin ASR Project

Over the past few years, the groundwater model has been used to evaluate a proposed City of Santa Cruz aquifer storage and recovery (ASR) project. Modeling was used to identify benefits or detriments to the basin resulting from the proposed ASR project. The City of Santa Cruz’s evaluation into the feasibility of an ASR project in the basin is ongoing, and they are hoping that injection well testing can take place sometime in the next year. Work associated with the Santa Margarita Groundwater Agency (SMGWA) GSP is also considering and modeling slightly different forms of a City of Santa Cruz ASR project as a potential project that could help achieve basin sustainability over the long-term.

### 6.1.6 Low Impact Development Projects

Low impact development (LID) projects consist of applying stormwater best management practices (BMPs) – such as infiltration basins, vegetated swales, bio-retention and/or tree box filters – to retain and infiltrate stormwater that is currently being diverted into the storm drain system. The infiltrated stormwater recharges the shallow aquifers in a manner similar to natural processes. The infiltration helps augment groundwater levels and sustains groundwater contributions to stream baseflow that supports local fishery habitats. A complicating factor in implementing LID projects in the Scotts Valley area is that there is no centralized stormwater collection system, which limits the ability to do large scale projects to direct groundwater augmentation to the most beneficial areas.

The District installed monitoring equipment to assess the performance of the facilities in 2017. The total amount of stormwater infiltrated at the three LID facilities in the SVWD service area in WY2019 was 40.38 acre-feet and in WY2020 it was 19.42 acre-feet (Table 11).

Table 11. Volume Infiltrated at LID Facilities in SVWD Service Areas

Water Year	Volume Infiltrated, acre-feet			
	Transit Center	Woodside HOA	Scotts Valley Library	Total
2018	1.75	17.3	3.39	22.44
2019	3.08	31.17*	6.11*	40.38*
2020	1.5*	14.97*	2.94*	19.42*

\*Volumes estimated using available data

### **Transit Center LID**

The District obtained grant funding through a Santa Cruz County Prop 84 grant from the SWRCB for the planning, design, and construction of a LID retrofit at the Scotts Valley Transit Center site (Figure 22). The design included construction of a vegetated swale, a below-ground infiltration basin, and pervious pavement. Construction began in October 2016 and was completed in May 2017. In WY2020, a total of 1.5 acre-feet was infiltrated at this location.

### **Woodside HOA LID**

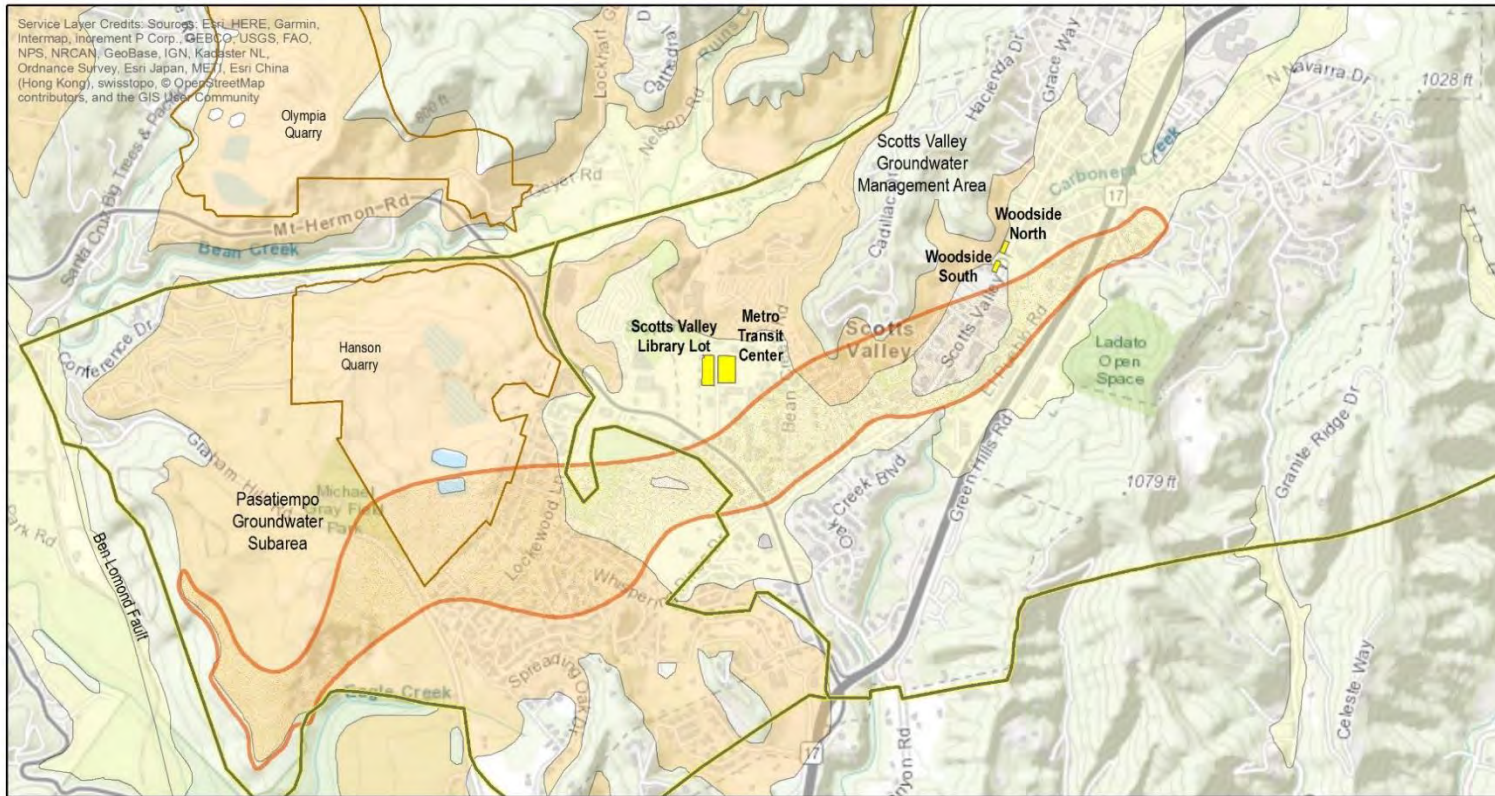
As part of the Prop 84 grant match, the District worked with a local developer to install a stormwater recharge facility at the Woodside HOA along Scotts Valley Drive (Figure 22). This facility includes a large below-ground infiltration basin. Stormwater is routed from the development to the basin where it can percolate down into the groundwater. Initial hydrology reports estimated recharge on the order of 20 to 40 acre-feet per year (Ruggeri, Jensen, and Azar, 2010). In WY2020, a total of 14.97 acre-feet was infiltrated at this location.

### **Scotts Valley Library LID**

An earlier grant-funded project installed a below-ground infiltration basin at the Scotts Valley Library (Figure 22). In WY2020, a total of 2.94 acre-feet was infiltrated at this location.

All three LID facilities overlie Santa Margarita sandstone (Figure 22). Figure 22 shows the location of the LID facilities in relation to surface geology and the area where the Santa Margarita aquifer directly overlies the Lompico aquifer due to the absence of the less permeable Monterey formation. Because the LID facilities are not located in the area where the Monterey formation is missing, there is less potential of the LID facilities recharging the Lompico aquifer.

In addition to large LID projects as described above, the District is part of the Strategic and Technical Resources Advisory Groups for Ecology Action's regional sponsorship of the Prop 84 LID Incentives Grant. District staff provided input on rating criteria for the landscape certification program and the structure in the grant reporting. Through 2018, 32 SVWD customers were awarded grant incentives for making stormwater management improvements to their properties, with strategies such as rainwater harvesting, lawn and hardscape removal, and stormwater retention methods, such as swales and rain gardens. According to SVWD staff records, the program provided 31,733 square-feet of permeable recharge area.



H:\Scotts\_Valley\_WD\2018\_Annual\_Report\GIS\AnnualRpt\_LID\_2018.mxd

**EXPLANATION**

- Low Impact Development Projects
- Location of Direct Contact between the Santa Margarita Sandstone and the Lompico Sandstone
- Quarry Location
- Groundwater Management Areas
- Santa Margarita Outcrops
- Alluvium
- Santa Margarita Sandstone

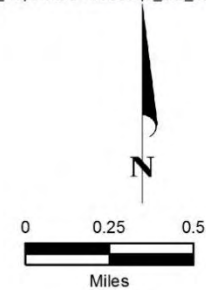


Figure 22. Location of Low Impact Development Projects

### 6.1.7 Purified Recycled Water Recharge Project

The District is still assessing the feasibility and benefit to the Basin of a groundwater replenishment project using advanced treated purified wastewater. In 2020, Kennedy Jenks completed a new feasibility study comparing six potential alternatives that use different sources of recycled water. All alternatives assume three injection facilities near the District's El Pueblo Yard in central Scotts Valley, including reuse of wells SVWD #11A and #11B. Alternatives with more than 540 AFY to be injected require an additional two injection wells at locations to be determined. Direct injection of water provides a direct means of replenishing water to an aquifer and raising groundwater levels, without relying on the variable natural recharge process. Recent predictive modeling using the updated SMGWA groundwater model shows that the project could add 710 acre-feet per year into the Lompico aquifer, and groundwater levels could increase approximately 80 feet in the area of injection and up to 25 feet in the south Scotts Valley area.

## 6.2 Groundwater Management Activities

### 6.2.1 Sustainable Groundwater Management

SVWD actively participates in the Santa Margarita Groundwater Agency (SMGWA), the Basin's Groundwater Sustainability Agency (GSA), formed per the Sustainable Groundwater Management Act (SGMA) of 2014. The District is a member of the SMGWA, comprising the SVWD, San Lorenzo Valley Water District, and the County of Santa Cruz. The Board of Directors of the SMGWA includes two Board members from each of the member agencies, one from the City of Scotts Valley, one from the City of Santa Cruz, one from the Mount Hermon Association Community Water System, and two private well owner representatives. The SMGWA Board meets monthly overseeing development of the Basin's GSP. The GSP is required to be submitted to DWR by January 31, 2022.

### 6.2.2 Santa Margarita Basin Groundwater Model

SVWD received a Prop 84 Planning Grant in 2011 as part of the Santa Cruz IRWMP to update the existing SMGB Groundwater Model developed by ETIC (2006). The SMGB Groundwater Model provides a quantitative tool to assess regional groundwater conditions for the entire SMGB to support groundwater management and design of water augmentation projects. Kennedy Jenks Consultants updated, calibrated, and improved the model, especially with respect to its ability to accurately evaluate groundwater-surface water interactions and verified the model's applicability across the entire SMGB, not just the GWRA. The model was also updated with the most recent geological interpretations and incorporated improvements in modeling techniques

and software. The technical report (Kennedy Jenks, 2015) is available on the District's website at <http://svwd.org/resources/reports>.

There have been minor updates to the model carried out by HydroMetrics WRI in 2016/2017. In WY2018, the SMGWA commissioned an evaluation of the model based on its ability to support GSP development. The evaluation included a series of recommended updates related to the model's hydrogeologic framework, recharge and evapotranspiration inputs, model calibration and uncertainty, and SGMA objectives. Extension updates to the model have been made as part of developing the Basin's GSP and it is being used to simulate Basin impacts from potential projects, such as in-lieu/conjunctive use, aquifer storage and recovery, and injection of highly treated recycled water. A report documenting the model updates and improvements will be included as an appendix to the GSP.

## 6.3 Groundwater Management Monitoring Program

The BMOs include provisions for ongoing monitoring of groundwater conditions, which is a requirement of Groundwater Management Act (CWC§ 10750 *et. seq.*) The following provides a brief overview of the monitoring program.

### 6.3.1 SVWD Data Collection

As part of the GWMP, the District has run a Groundwater Management Monitoring Plan for over 20 years to assess groundwater conditions in the GWRA. The SVWD Groundwater Management Monitoring Program provides a systematic procedure for data collection to support the District in assessing the hydrologic conditions of the SMGB in the GWRA. The primary components of this Monitoring Program are:

**Groundwater Levels** - Groundwater elevation data collected by SVWD, other local agencies, environmental remediation sites, private entities, and consultants.

**Groundwater Pumping** - Groundwater pumping compiled by SVWD and nearby groundwater users.

**Precipitation** - Precipitation data measured by SVWD and other nearby gauges.

**Water Quality** - Water quality data collected by SVWD, private entities, and environmental compliance sites.

The current Groundwater Management Monitoring Plan was included in the 2008 annual report. Monitoring locations are shown on Figure 4 and monitoring wells are listed in Table 12. The list has been amended to include newly constructed wells and remove inaccessible or destroyed wells.

Table 12. Wells Used for the Groundwater Management Monitoring Program

Well Name	Well Owner	Top of Casing Elevation (feet msl)	Primary Producing Formation	Screen Interval Depth (feet bgs)
<b>SVWD Production Wells – Measurements taken monthly for both static and dynamic levels</b>				
SVWD Well #3B	SVWD	672.47	Butano	700-730, 880-1050, 1180-1370, 1400-1670
SVWD Orchard Well	SVWD	723	Butano	705-784, 805-1063, 1084-1455
SVWD Well #9	SVWD	528.14	Monterey	155-195, 315-355
SVWD Well #10 (to be destroyed in FY2020)	SVWD	510.85	Lompico	190-220, 240-270, 325-355
SVWD Well #10A	SVWD	512.00	Lompico	280-380, 400-450
SVWD Well #11A	SVWD	602.60	Lompico	399-419, 459-469, 495-515
SVWD Well #11B	SVWD	587.95	Lompico	348-388, 423-468, 500-515
<b>SVWD Monitoring Wells - Key Indicator Wells – Measurements taken monthly</b>				
#15 Monitoring Well <sup>2</sup>	SVWD	660	Lompico, Butano	700-1100
#9 Monitoring Well	SVWD	528	Monterey	N/A
<b>SVWD Monitoring Wells - Measurements taken semi-annually</b>				
SVWD AB303 MW-1 <sup>1</sup>	SVWD	561.07	Santa Margarita	114-124
SVWD AB303 MW-2 <sup>2</sup>	SVWD	524.22	Lompico	705-715, 810-850
SVWD AB303 MW-3A <sup>1</sup>	SVWD	522.69	Lompico	630-680
SVWD AB303 MW-3B <sup>1</sup>	SVWD	522.11	Santa Margarita	120-125
Canham Well	SVWD	782.78	Butano	1,281-1,381
Stonewood Well	SVWD	898.54	Butano	799-859
SV1-MW (filled with sand)	SVWD	704.3	Santa Margarita	60-80
SV3-MW A	SVWD	584.65	Santa Margarita	60-80
SV3-MW B	SVWD	584.65	Santa Margarita	100-110
SV3-MW C	SVWD	584.65	Lompico	150-160
SV4-MW	SVWD	447.79	Santa Margarita	50-60
TW-18 <sup>1,2</sup>	SVWD	715.03	Santa Margarita	285-345
TW-19 <sup>1,2</sup>	SVWD	659.49	Lompico	960-1060

Notes: <sup>1</sup>Groundwater level measurement data submitted to DWR CASGEM Program

<sup>2</sup>Equipped with electronic data transducer

feet msl = elevation in feet relative to mean sea level

feet bgs = depth in feet below ground surface

The results, analysis and interpretation of data collected for the Groundwater Management Monitoring Program are incorporated into and discussed throughout this annual report. The database that was set up as part of the Groundwater Management Monitoring Program is kept updated each year when this annual report is prepared. Although, this annual report does not contain a comprehensive listing of the District's database, the database can be made available by contacting the District.

To further supplement the Groundwater Management Monitoring Plan, the District has installed electronic data transducers for collecting continuous groundwater level data in most of its monitoring and production wells. Data collected by the transducers provide a key data set for evaluating long-term aquifer responses to pumping and recharge. Table 12 identifies the wells currently equipped with transducers.

### 6.3.2 CASGEM Program

In 2009, the California Statewide Groundwater Elevation Monitoring (CASGEM) program was established to develop a statewide monitoring program to track seasonal and long-term trends in groundwater elevation by establishing a permanent, locally-managed program of regular and systematic monitoring in all of California's alluvial groundwater basins. Participation in CASGEM is typically a requirement for receiving DWR grants.

The Santa Cruz County Environmental Health Services is coordinating the DWR reporting responsibilities for all of Santa Cruz County. SVWD supports this effort by providing groundwater elevation data collected as part of the District's groundwater management activities. Table 12 indicates the wells that are reported to DWR for the CASGEM program. Reported data are available on the DWR website at:  
<http://www.water.ca.gov/groundwater/casgem/>.

Once the SMGWA's GSP is submitted to DWR, groundwater level data collected by the GSP's monitoring network are required to be uploaded semi-annually to the SGMA monitoring network portal. This effectively replaces the CASGEM program.

## 6.4 Stakeholder Outreach

Two BMOs address public participation in groundwater management activities and coordination with local agencies. The District uses several methods to accomplish this BMO. SVWD discusses groundwater management related activities in noticed regular public meetings of the SVWD Board of Directors. Notification of future meetings and agendas are made publicly available prior to the meeting. Copies of the agenda packages including staff reports are available for public review on the SVWD web site ([www.svwd.org](http://www.svwd.org)).

- SVWD builds public awareness through the development and publishing of its Groundwater Management Program annual reports. Copies of the annual report are publicly available on the District's website at <http://svwd.org/resources/reports>.
- SVWD actively participates in the SMGWA and the Santa Cruz Integrated Regional Water Management Group, both forums for developing collaborative solutions with local agencies.
- The District's 2015 Urban Water Management Plan (UWMP) filed with DWR is available at: <http://svwd.org/resources/reports>. The UWMP assesses the District's water supply, guides water use efficiency efforts, and provides a Water Shortage Contingency Plan to be implemented during times of water shortage. The UWMP is required to be updated every 5 years.

## 7 REFERENCES CITED

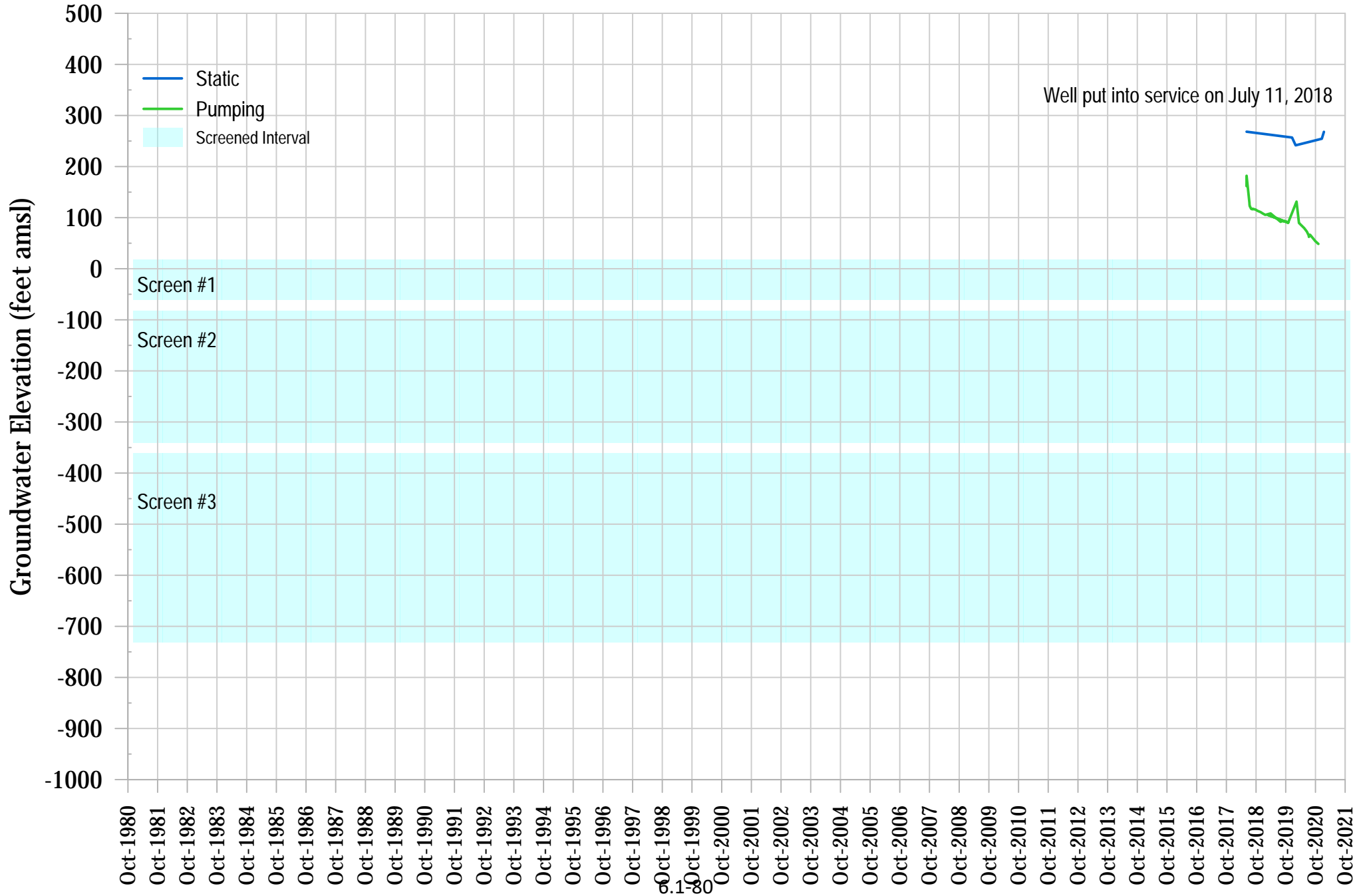
---

- ARCADIS. 2015. Revised final remedy, former Watkins-Johnson Superfund Site. Prepared for TriQuint Semiconductor, Inc. June.
- California Department of Water Resources (DWR). 2016. 2016 Bulletin 118 Interim Update. [http://www.water.ca.gov/groundwater/bulletin118/docs/Bulletin\\_118\\_Interim\\_Update\\_2016.pdf](http://www.water.ca.gov/groundwater/bulletin118/docs/Bulletin_118_Interim_Update_2016.pdf). December 22.
- City of Scotts Valley. 2021. City of Scotts Valley wastewater treatment facility 2020 annual report.
- ETIC Engineering, Inc. 2006. Groundwater modeling study of the Santa Margarita groundwater basin final report: Prepared for Scotts Valley Water District. May.
- Feeney, M. 2015. Technical memorandum: Well 11A replacement project – feasibility evaluation. Prepared for Scotts Valley Water District. August 28.
- HydroMetrics WRI, 2011. Estimation of deep groundwater recharge using a precipitation-runoff watershed model, Soquel-Aptos, California. Prepared for Soquel Creek Water District, Central Water District, and City of Santa Cruz. August.
- Kennedy Jenks Consultants. 2015. Santa Margarita Basin groundwater modeling technical study. Prepared for Scotts Valley Water District. June 24.
- Kennedy Jenks Consultants. 2016a. Scotts Valley Water District 2015 annual report, groundwater management plan. Prepared for Scotts Valley Water District. February 26.
- Kennedy Jenks Consultants. 2016b. 2015 urban water management plan. Prepared for Scotts Valley Water District. June.
- Kennedy Jenks Consultants. 2017. Santa Margarita Groundwater Basin recycled water groundwater replenishment programs, facilities planning report. Prepared for Scotts Valley Water District. February.
- Ruggeri, Jensen, and Azar. 2010. Preliminary hydrology report for Woodside, City of Scotts Valley, Santa Cruz County, California, prepared for Sullivan Land Development, LLC. February 17.
- Todd Engineers. 1994. Scotts Valley groundwater management plan (AB 3030). Prepared for Scotts Valley Water District, 94 p.

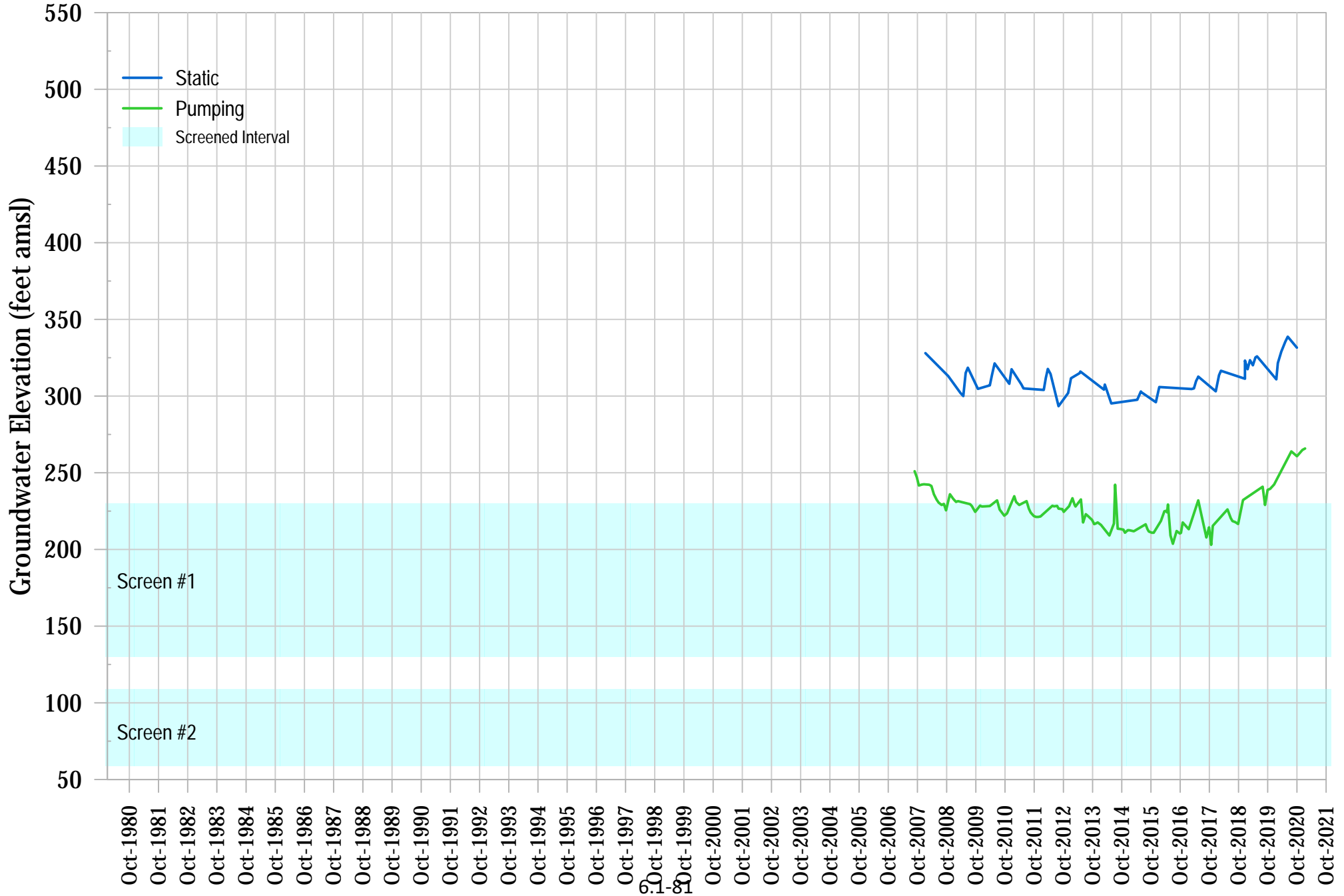
## Appendix A

### Hydrographs of SVWD Production Wells

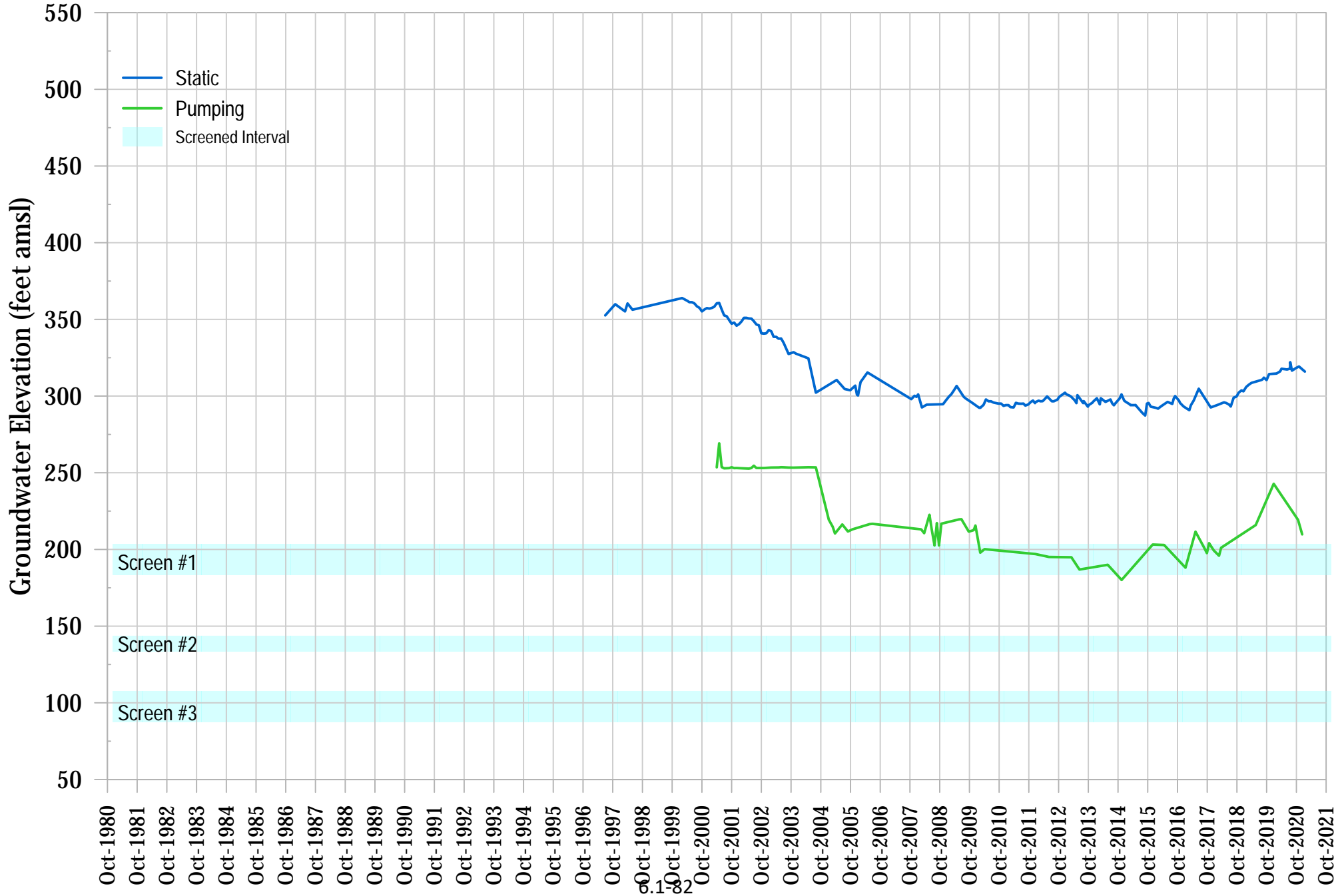
# SVWD Orchard Well - Comparison of Water Levels and Screened Interval



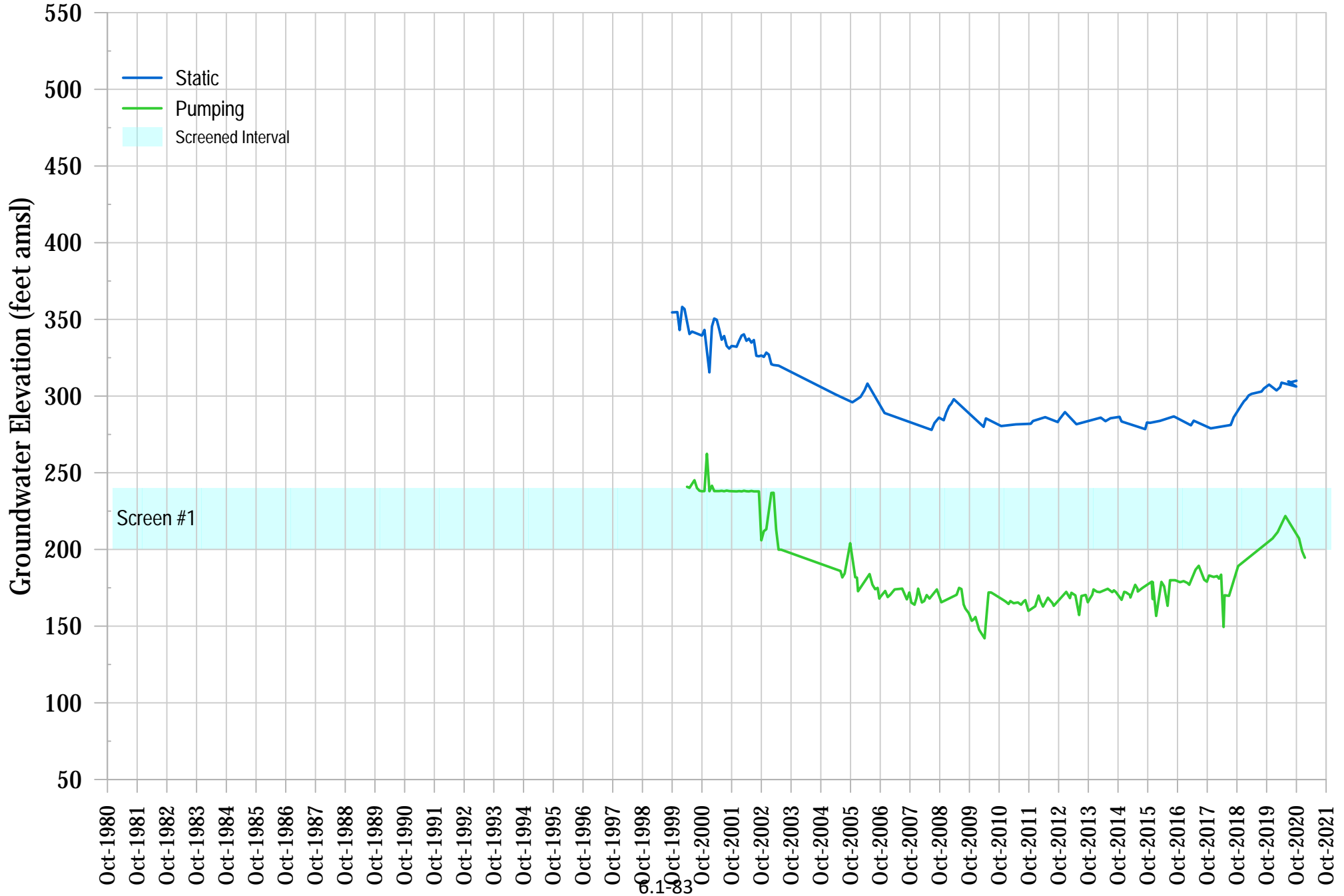
# SVWD Well #10A - Comparison of Water Levels and Screened Interval



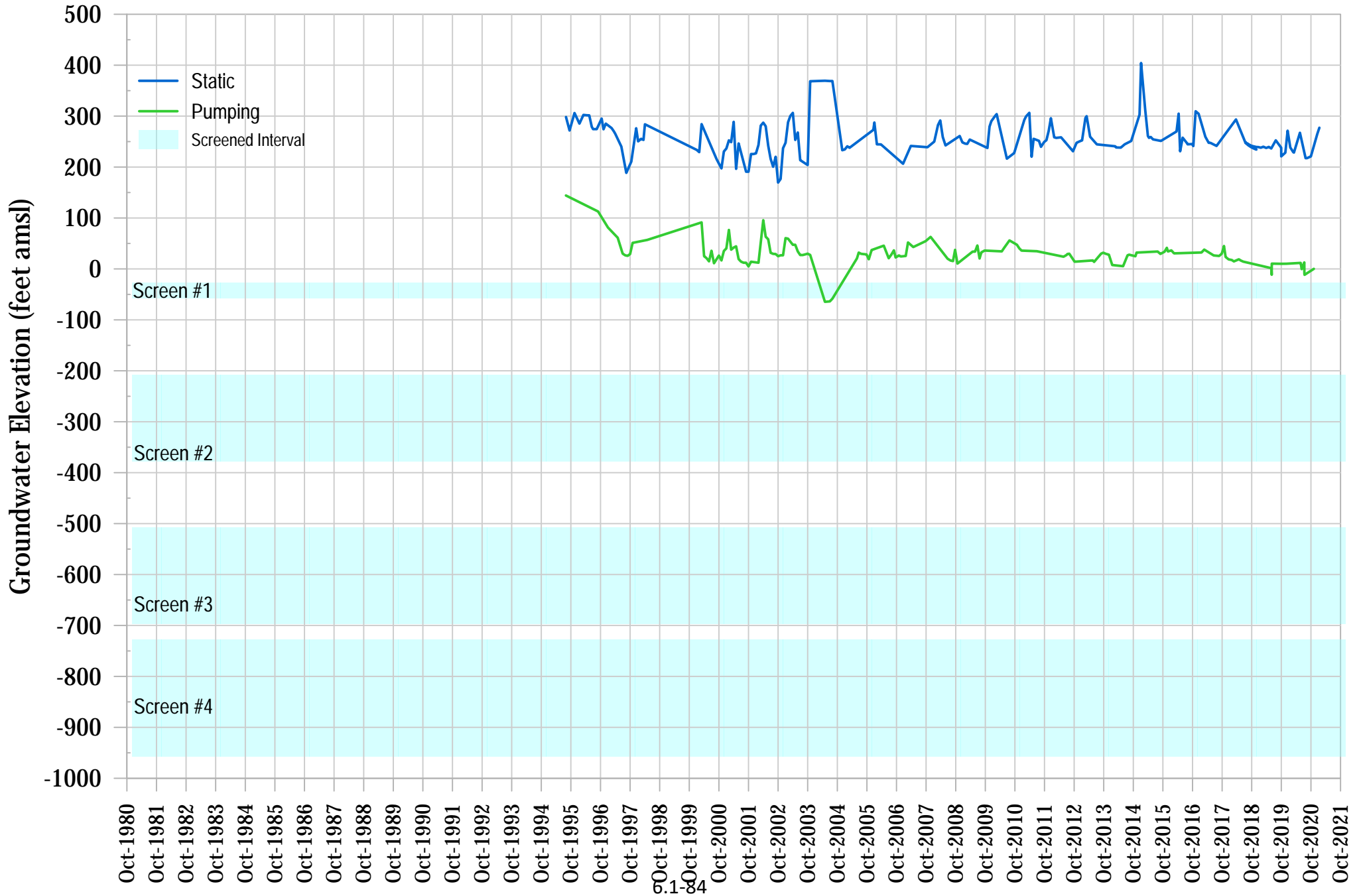
# SVWD Well #11A - Comparison of Water Levels and Screened Interval



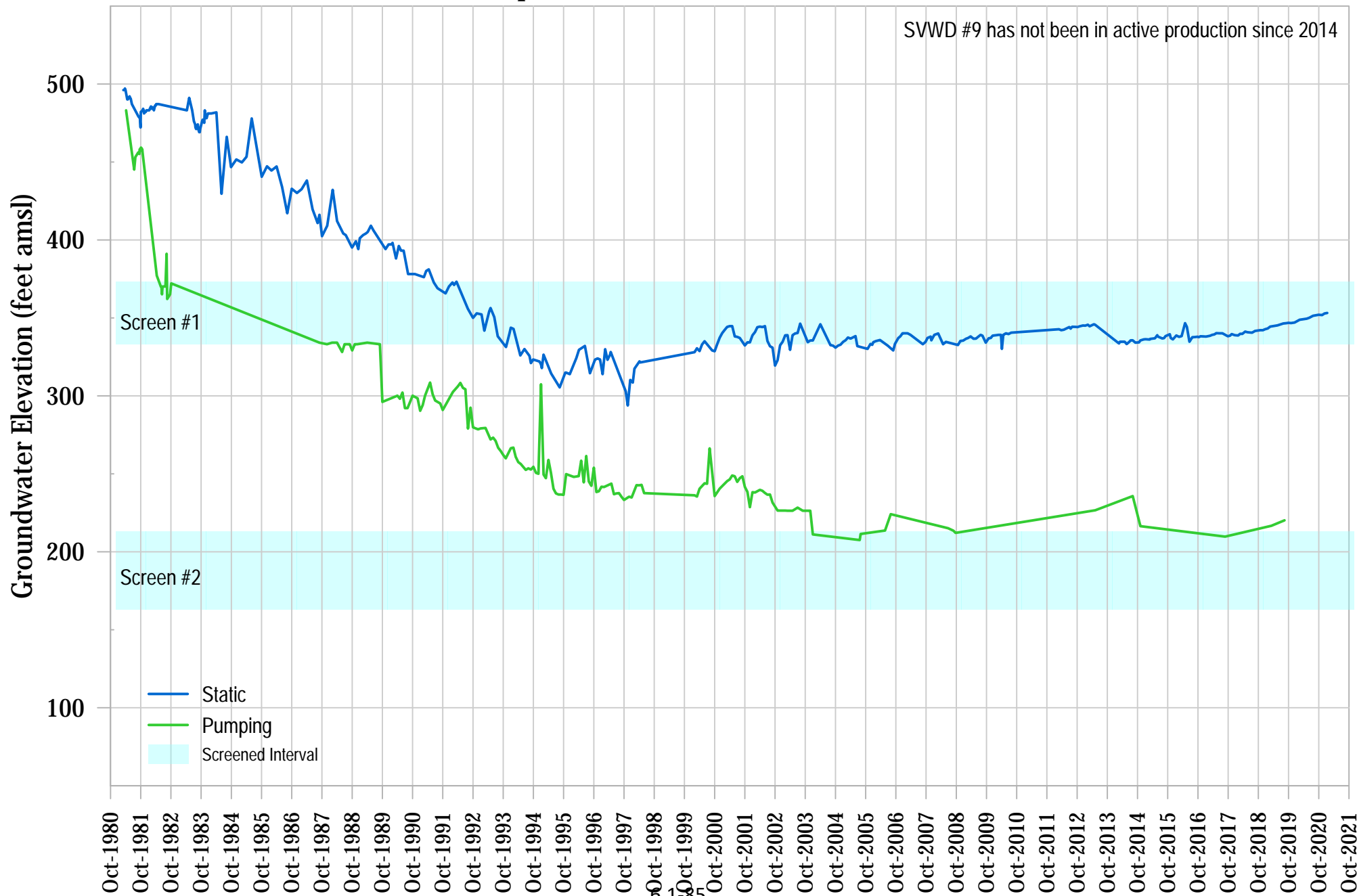
# SVWD Well #11B - Comparison of Water Levels and Screened Interval



# SVWD Well #3B - Comparison of Water Levels and Screened Interval



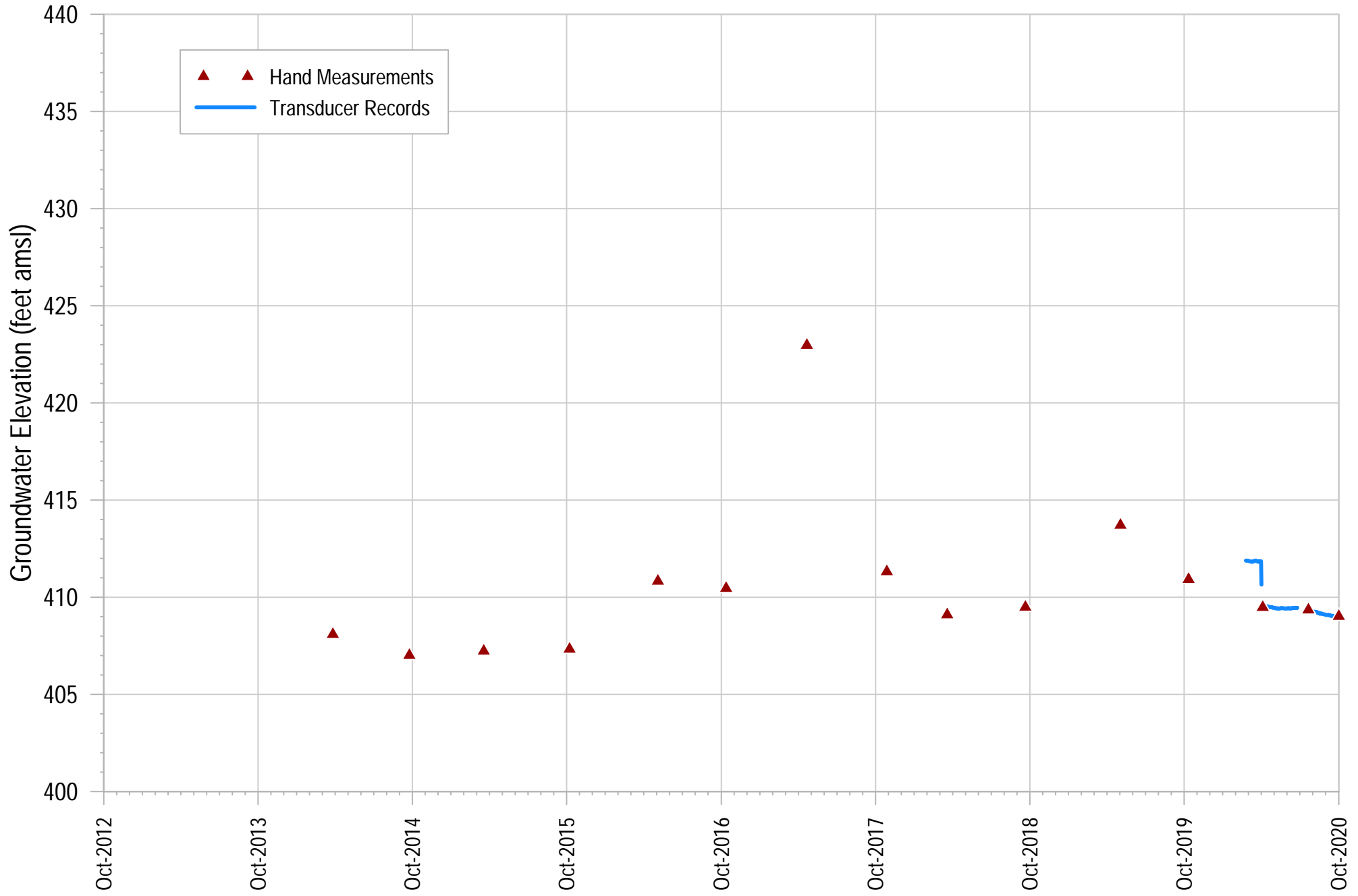
# SVWD Well #9 - Comparison of Water Levels and Screened Interval



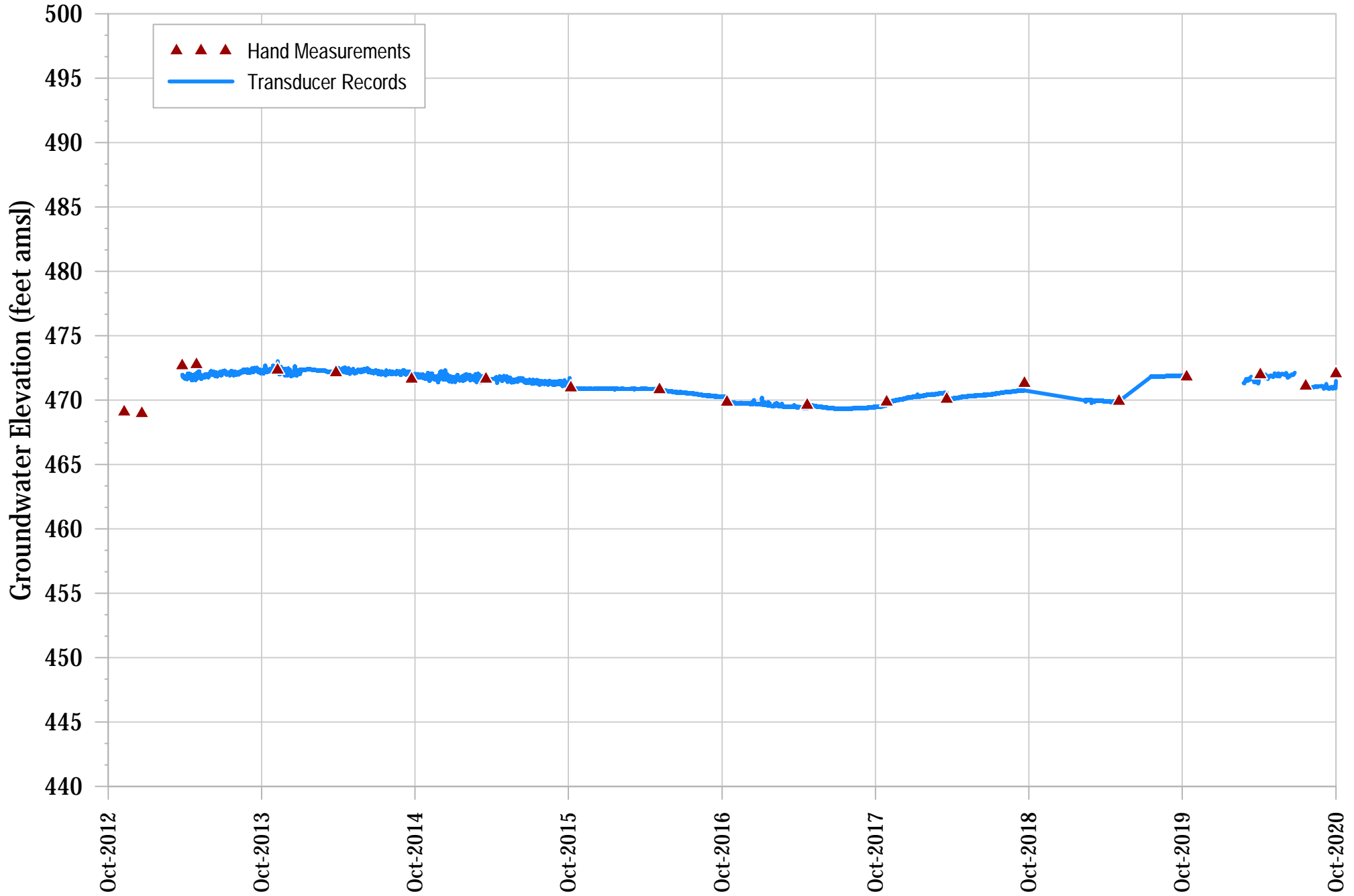
## Appendix B

### Hydrographs of Wells with Transducers

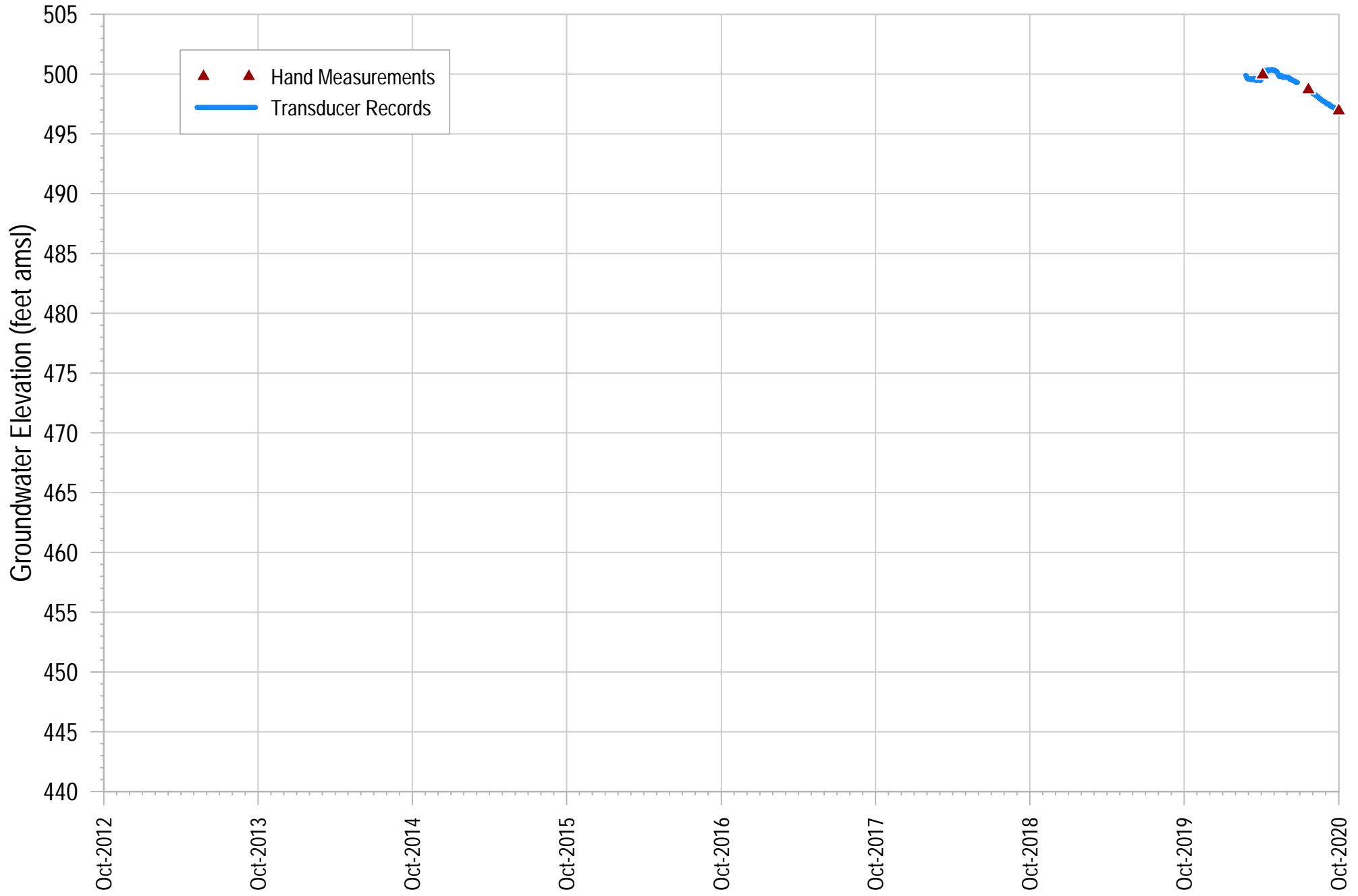
# Continuous Groundwater Elevations for SVWD AB303 MW-3B (Santa Margarita)



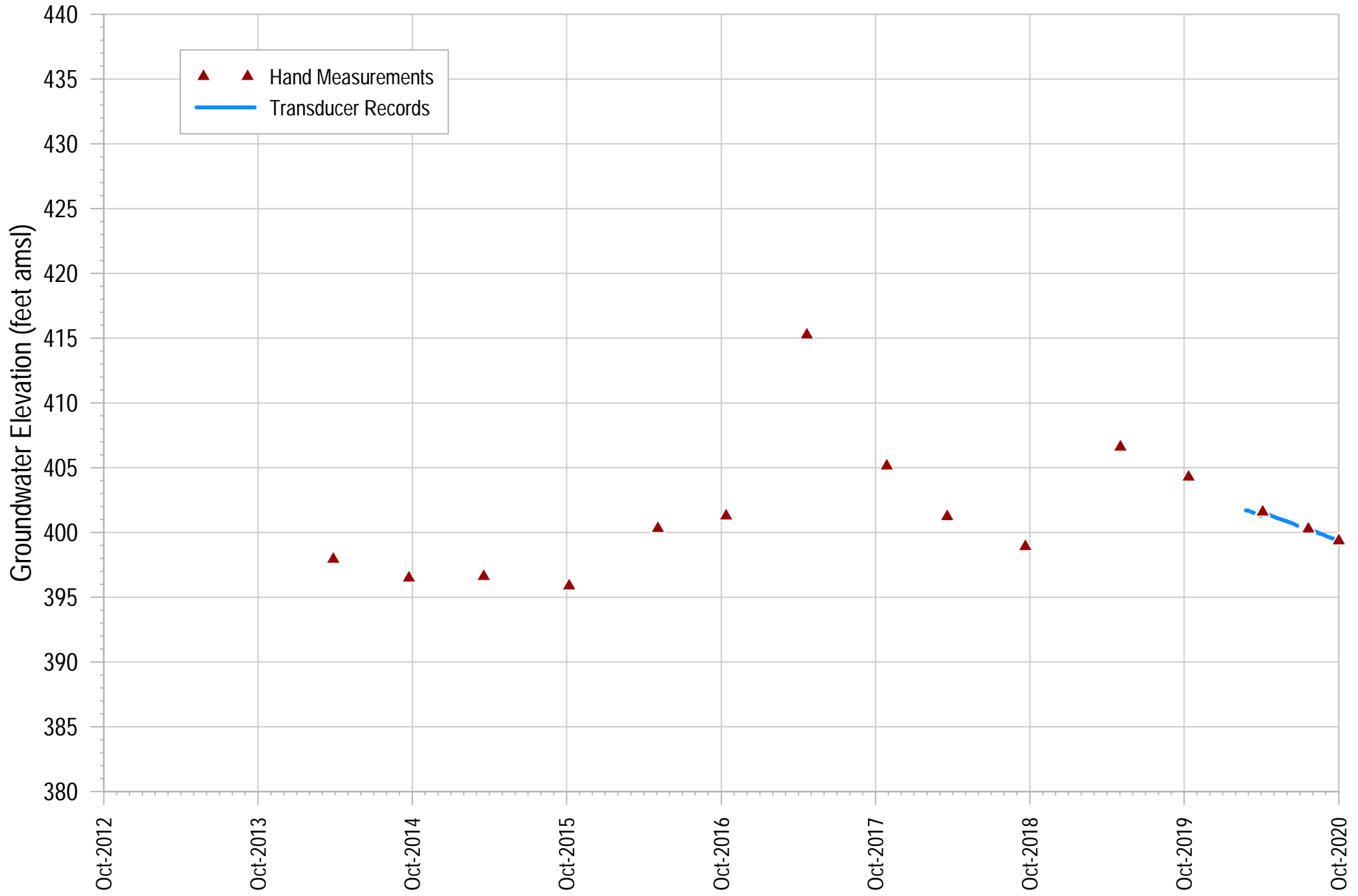
# Continuous Groundwater Elevations for TW-18 (Santa Margarita)



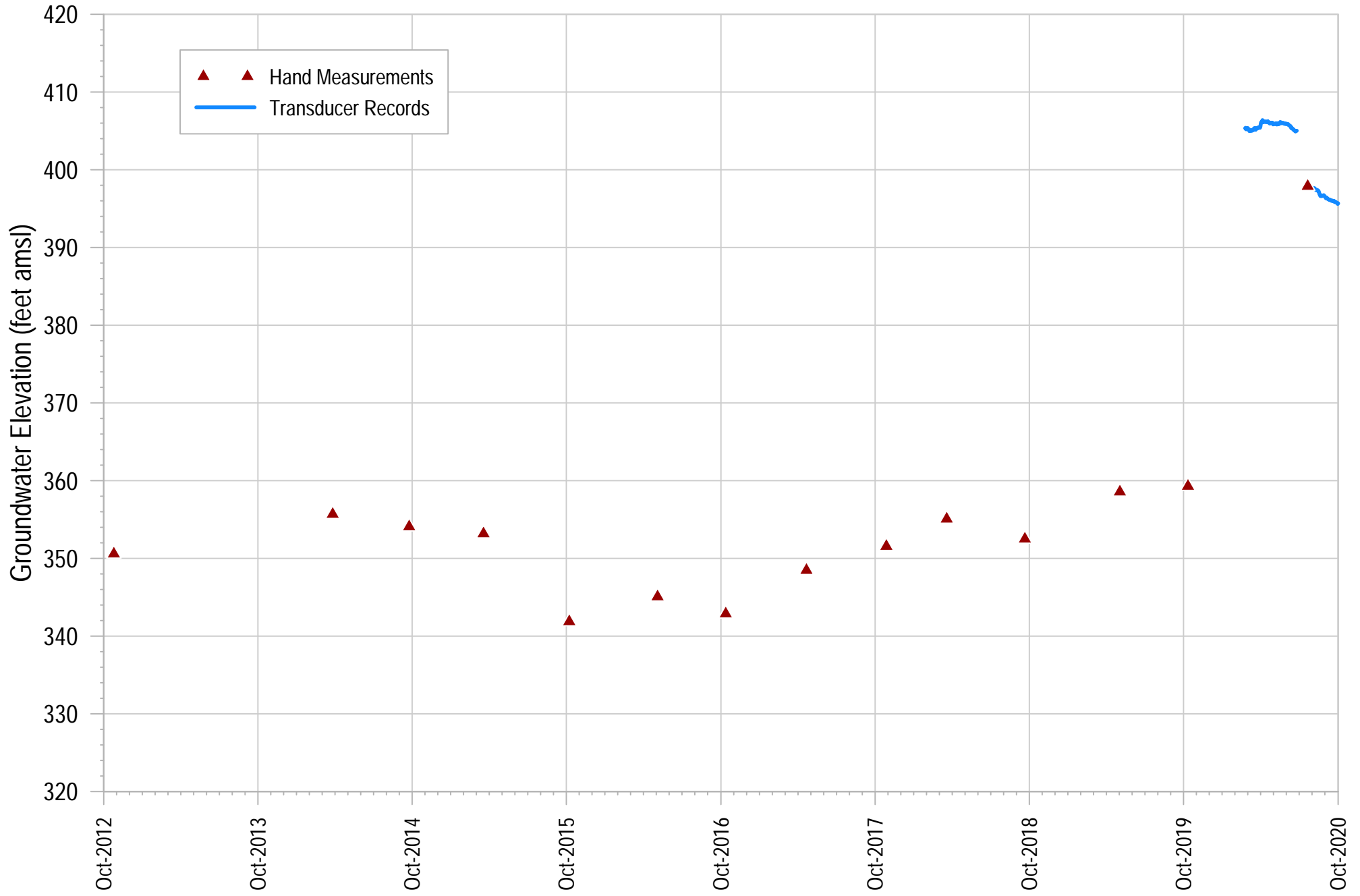
# Continuous Groundwater Elevations for SVWD Rockery (Santa Margarita)



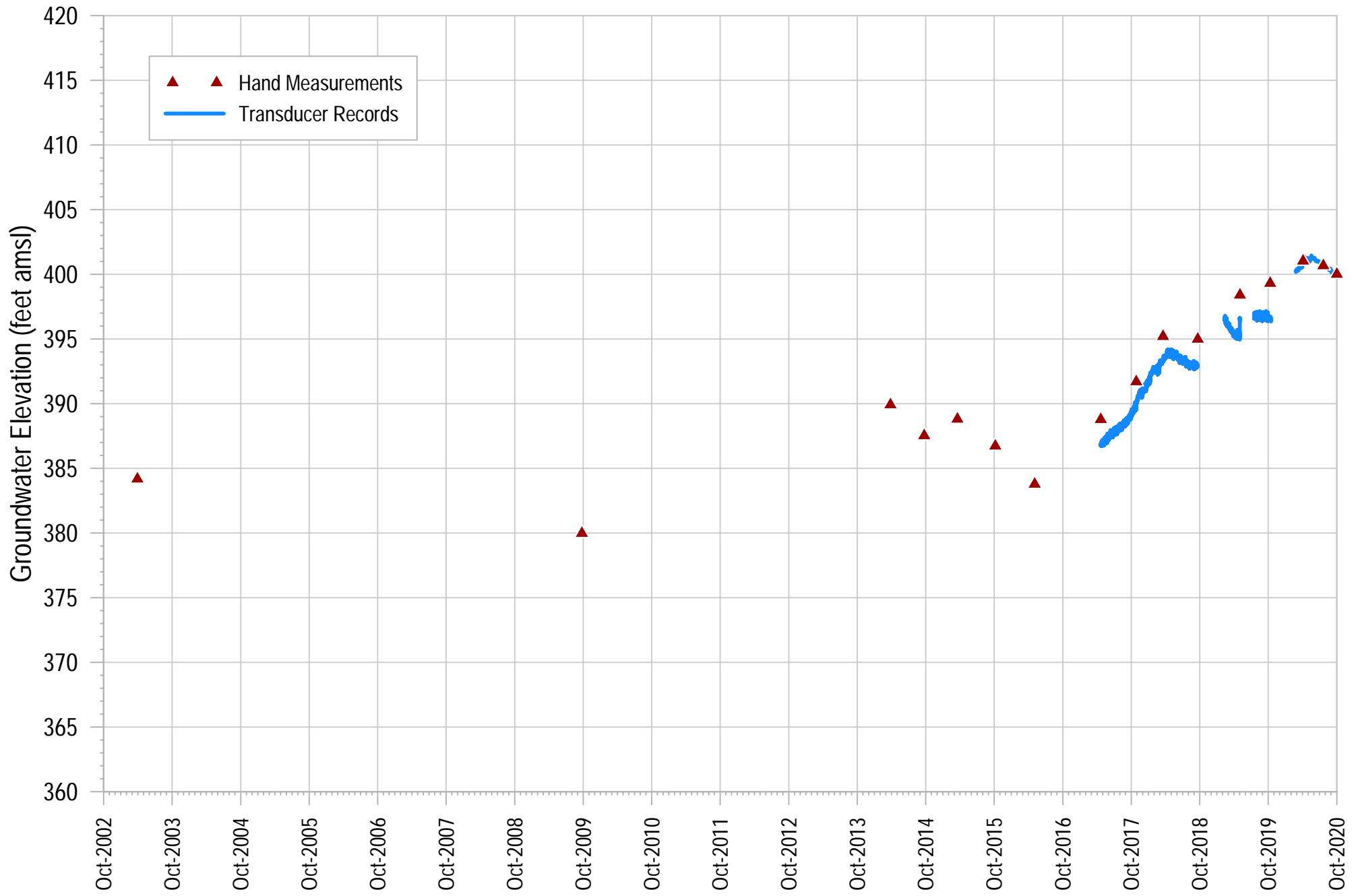
# Continuous Groundwater Elevations for SV4-MW (Santa Margarita)



# Continuous Groundwater Elevations for AB303 MW-3A (Lompico)

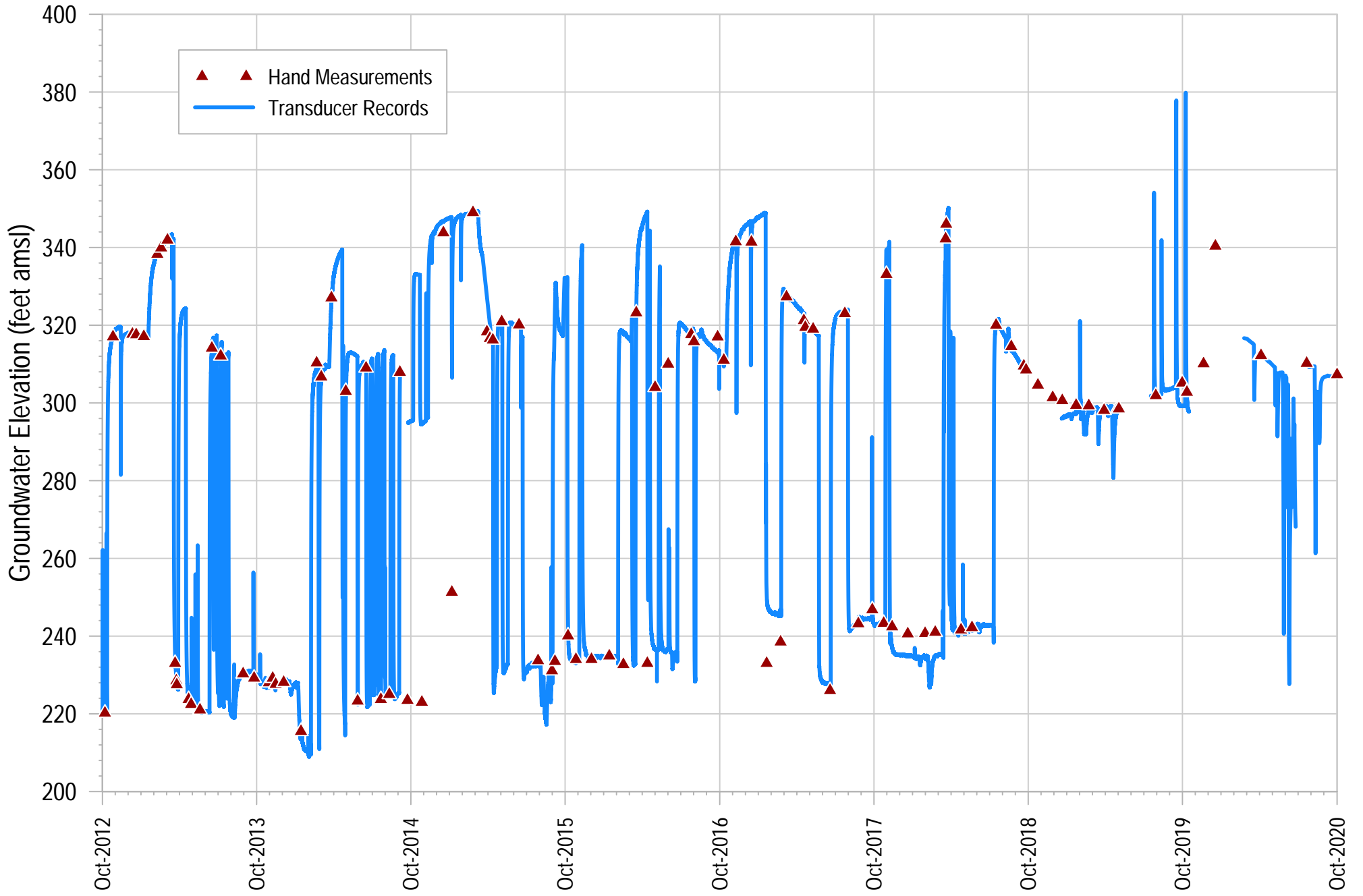


# Continuous Groundwater Elevations for AB303-MW2 Monitoring Well (Lompico)

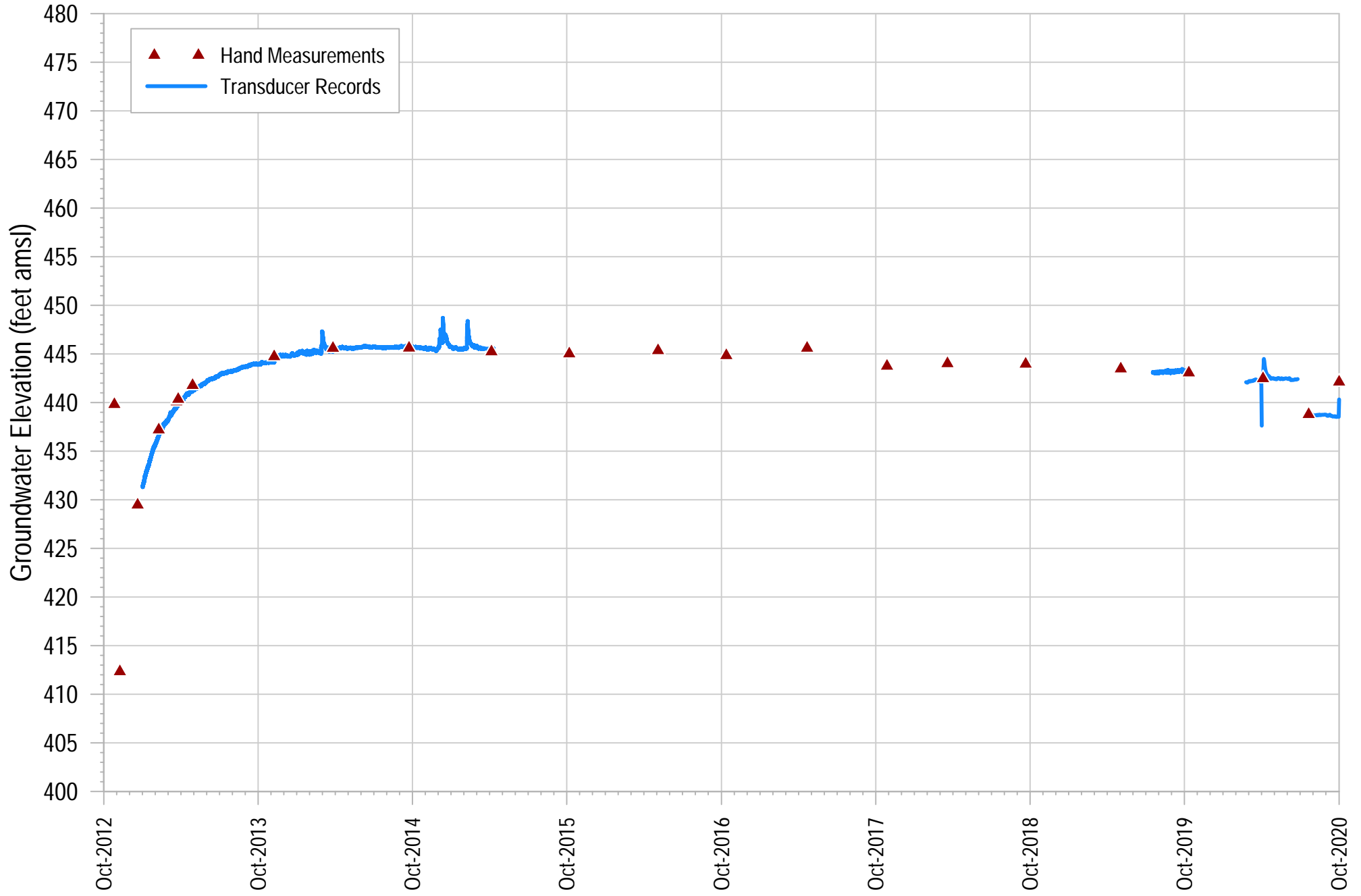




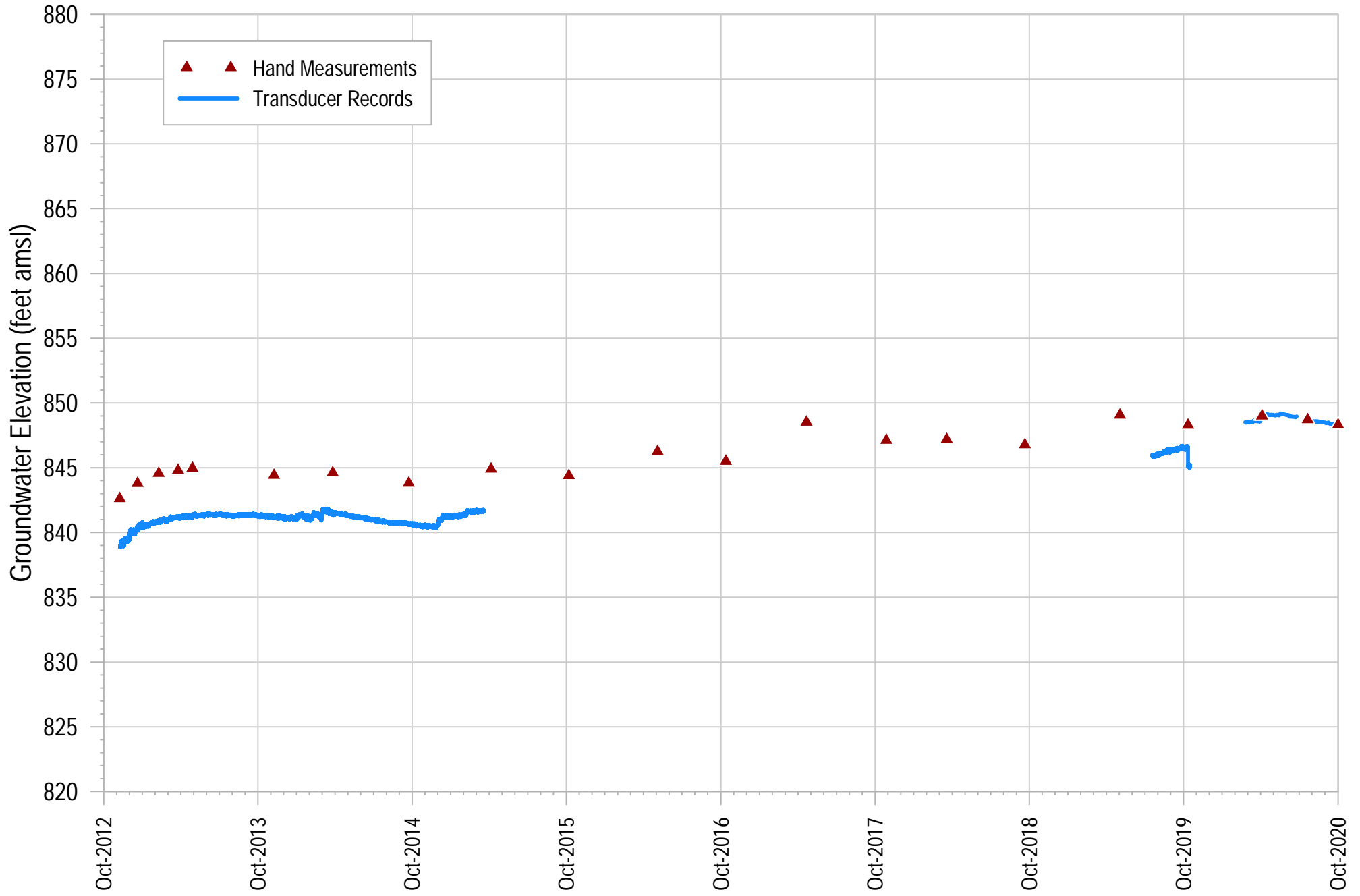
# Continuous Groundwater Elevations for #15 Monitoring Well (Lompico/Butano)



# Continuous Groundwater Elevations for Canham Well (Butano)



# Continuous Groundwater Elevations for Stonewood Well (Butano)



## **AGENDA REPORT**

Scotts Valley Water District

**Date:** 04/08/21

**To:** Board of Directors

**Item:** Business 6.2

**Subject:** **Draft Annual Work Plan, Fiscal Year 2022**

**Reason:** Supports District Mission and Strategic Goals

### **SUMMARY**

**Recommendation:** Review and accept the FY 2022 Draft Annual Work Plan.

**Fiscal Impact:** The impact is unknown at this phase of planning. Final FY 2022 Work Plan will be matched with the proposed balanced budget for the upcoming fiscal year.

**Previous Related Action:** On 02/13/14 the Board adopted the District Mission, Values, Vision and Strategic Goals.

On 02/13/20 the Board approved revisions to the District Mission, Values, Vision and Strategic Goals.

On 03/12/20 the Board approved the Management Objectives that support the District Strategic Goals in the next 2-year timeframe.

On 04/09/20 the Board reviewed and accepted the Draft FY 2021 Work Plan.

### **BACKGROUND**

At the strategic planning workshops in early 2020, the Board reviewed and revised the Mission, Core Values, Vision and Strategic Goals that were adopted in 2014 and slightly modified in 2017. The main focus was on considering any potential changes in the context of the utilities industry and economic drivers around us, including changes in technology and in consumer behavior. They discussed trends that could be turned into economic opportunities in the future trying to imagine not only how the District will operate in the future but how the industry will evolve and how new partnerships will emerge.

The Executive Team and the Board conducted a Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis, which resulted in ranking proposed initiatives and assigning priorities based on expected benefits, resource availabilities, internal capabilities and external drivers. The final

prioritization ranking was used to develop management objectives by ensuring that all Priority A (1-2 years) initiatives are captured in the updated strategic plan.

## **DISCUSSION**

As in the prior years, the General Manager and the executive staff used the Strategic Goals and Management Objectives as a springboard for outlining the major initiatives and projects that support the District's Mission and Vision in the upcoming fiscal year. The Draft Work Plan includes capital improvement projects, maintenance related activities, and major administrative and operational undertakings. The main goal is to ensure optimal alignment between the individual, team and organizational efforts, to reduce redundancies and maximize the use of limited resources.

Each of the tasks listed in the plan requires monetary and staff resources. Dependent on the budgetary constraints, some of the activities might be modified, postponed or eliminated. The Work Plan will be finalized in parallel with FY 2022 budget preparation.

Submitted,

Piret Harmon  
General Manager

Enclosed:     FY 2022 Draft Work Plan

**SCOTTS VALLEY WATER DISTRICT ANNUAL WORK PLAN FY 2022 - DRAFT**

STRATEGIC GOALS MANAGEMENT OBJECTIVES	<b>FY 2022 TASKS</b>	<b>P/O *</b>
--	----------------------	--------------

**1. Water Resource Management: SVWD meets the water supply needs of its customers by developing new, sustainable sources and maximizing the use of existing sources.**

1.1 Pursue the potential of wastewater for beneficial uses	Work with City staff in evaluating the condition of the Tertiary Treatment Plant and determining the necessary and optimum improvements	O
	Work with regional partners in developing a strategic direction for maximizing wastewater utilization in the region	O
	Assist the City with finding a mutually advantageous solution for wastewater operations	O
1.2 Identify and implement conjunctive use projects in the region	Be responsive to in-lieu project evaluation proposals from SCWD and SLVWD	O
1.3 Optimize the efficient use of water	Improve on 2019 Validated Water Loss Audit score of 60	O
	Develop metrics for measuring effectiveness of WaterSmart Portal for reducing inefficient use and water waste	O
	Use the outcome of the system pressure analysis to identify and prioritize projects that improve pressure throughout the distribution system	O
	Conduct leak detection audit for distribution system	O
	Coordinate with DWR & SWRCB to develop District-specific water efficiency objectives; identify and validate data sources that will be used to generate required reports for indoor vs. outdoor consumption	O
	Include and implement creative elements in Think Twice WUE Program to achieve appropriate demand reduction targets per Water Shortage Contingency Plan	O

**2. Infrastructure Integrity: SVWD provides continuous investment in its infrastructure and process improvements to ensure the efficiency of its operations.**

2.1 Maintain all assets within their useful life threshold	Replace 1,500 ft of potable main in 6 locations	P
	Continue work on Bethany Tank rehabilitation by completing inspection, determining necessary improvements, and commencing design	P
	Complete upgrades at El Pueblo Water Treatment Plant: installation and programming of plant control panel	P
	Replace Well 3B: design, permitting and construction	P
	Complete Hacienda PS upgrade: installation all necessary equipment: pumps, controls, generator	P
	Determine and prioritize repair needs for HQ building	O
2.2 Utilize technology and innovative solutions for improving operational efficiencies	Conduct an assessment and develop a master plan for SCADA improvements	O
	Participate in and support the activities to implement the regional data management system (DMS) hosted by County	O
	Coordinate the migration to new District website platform, optimize the value of its features and components	O
	Improve the process of conducting the RW site supervisor training, consider and evaluate third party solutions	O

**SCOTTS VALLEY WATER DISTRICT ANNUAL WORK PLAN FY 2022 - DRAFT**

STRATEGIC GOALS MANAGEMENT OBJECTIVES	FY 2022 TASKS	P/O *
2.3 Optimize the redundancy and effectiveness of the system and facilities	Develop a road map for new production well construction: site selection, scope and schedule	P
	Conduct an assessment of the meter reading/utility billing process, develop a implementation plan	O
	<i>Placeholder: conduct feasibility study for potential consolidation of SVWD and SLVWD, develop a plan for moving forward based on the study recommendations (pending on the SLVWD board decision)</i>	O
<b>3. Financial Stewardship: SVWD manages its financial resources in a manner that ensures the reliability of its operations and provides the greatest value to its customers.</b>		
3.1 Provide seamless customer experience	Convert majority of the customer facing forms to web format, assess the process and effectiveness of the storing the information	O
	Achieve 40% registration target on WaterSmart platform	O
	Achieve 20% customer profile update target on WaterSmart platform	O
3.2 Exploit integrated data management for maximum efficiency and transparency	Continue exploring and evaluating innovative and more user friendly utility billing and payment platform solutions	O
	Update the pertinent Utility Billing, Accounts Payable and Payroll procedure documents as determined by the review and assessment from FY 2021	O
	Evaluate production data collection and storing system and propose recommendations for improvement (internal process or outside solutions)	O
3.3 Design and manage balanced and fair revenue sources that are sufficient for meeting operating and capital needs while providing for adequate reserves	Conduct open and transparent Prop 218 process. Adopt a rate schedule supported by the Rate Study conducted in FY 2021.	O
	Implement transition of capital charge/basic service charge to property tax bill if deemed to be appropriate by Rate Study	O
	Arrange and close on financing for capital projects by issuing debt on terms that align with District objectives (reserves target and debt service coverage requirements)	O
<b>4. Community Engagement: SVWD proactively creates opportunities for strategic alliances and mutually beneficial relationships with its customers and partners.</b>		
4.1 Use creative approaches and technology for engaging the community	Participate in SV Art Wine Beer Festival with the goal for District to be approachable community member	O
	Organize a series of Water System Field Trips for public	O
	Hold WaterSmart training sessions at various community locations	O
	Design, produce and install interpretive signage at public-facing facilities	O
4.2 Increase youth involvement and education on water matters	Evaluate the Junior Associate Board Member Program and make necessary adjustments	O
	Partner with Scotts Valley High School in implementing their Career Exploration Program if determined to reconvene the activities	O
	Based on lesson learned from SMGWA Youth Outreach Program, consider piloting a SVWD youth involvement project	O
4.3 Identify, develop and strengthen strategic alliances, both private and public	Continue providing leadership and active participation in Santa Margarita Groundwater Agency (SMGWA) in working towards a development of the Groundwater Sustainability Plan by January 2022	O

SCOTTS VALLEY WATER DISTRICT ANNUAL WORK PLAN FY 2022 - DRAFT		
STRATEGIC GOALS MANAGEMENT OBJECTIVES	FY 2022 TASKS	P/O *
<b>5. Organizational Vitality: SVWD recruits and retains the highest quality employees and board members by offering a work environment in which they can thrive and succeed.</b>		
5.1 Provide meaningful and feasible career growth tools and opportunities	Include various staff members in community educational events such as system tours, instructional learning sessions	O
	Offer project based opportunities for staff to acquire broadbase knowledge of different disciplines	O
5.2 Cultivate productive work conditions and positive workforce culture	Complete and submit to EPA the updated Emergency Response Plan	O
	Complete 100% of the training requirements for each employee	O
	Continue to carry out the records management action plan with a goal of 75% completion	O
	Assess and upgrade tools necessary for digital communication, learning and meeting	O
5.3 Support continuous training and knowledge transfer	Maximize the benefits of Target Safety Solutions online training	O
	Utilize virtual education and meeting opportunities for all employees	O
	Explore creative opportunities to expand Board of Directors networking	O
* P/O - Project or Operations Budget		

## **AGENDA REPORT**

Scotts Valley Water District

**Date:** 04/08/21

**To:** Board of Directors

**Item:** Business 6.3

**Subject:** **Capital and Maintenance Projects FY 2022-2026 Budget Projection**

**Reason:** Supports District's Strategic Goal No. 2 Infrastructure Integrity: Provide continual investments in District's infrastructure.

### **SUMMARY**

**Recommendation:** Receive information and provide input.

**Fiscal Impact:** The total proposed FY 2022 new appropriations for capital and maintenance projects are \$2,030,000. The final request will be included in the FY 2022 proposed budget.

**Previous Related Action:** On 03/22/21 the Water Resources and Engineering committee reviewed a draft FY 2022-2026 Projects Budget.

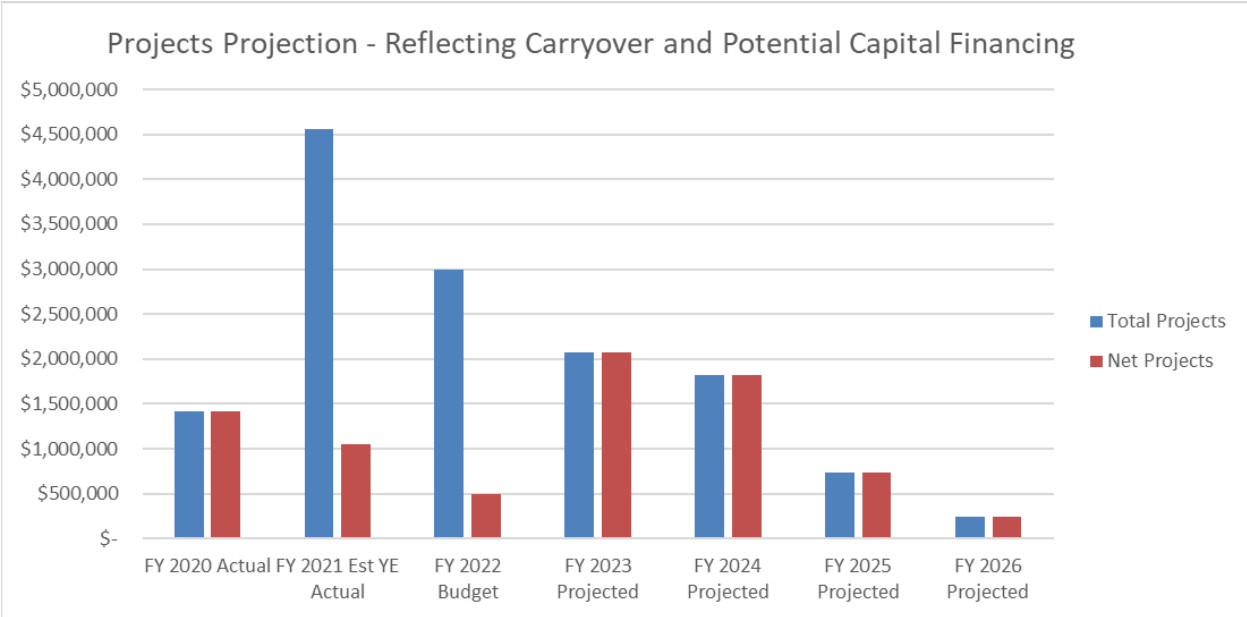
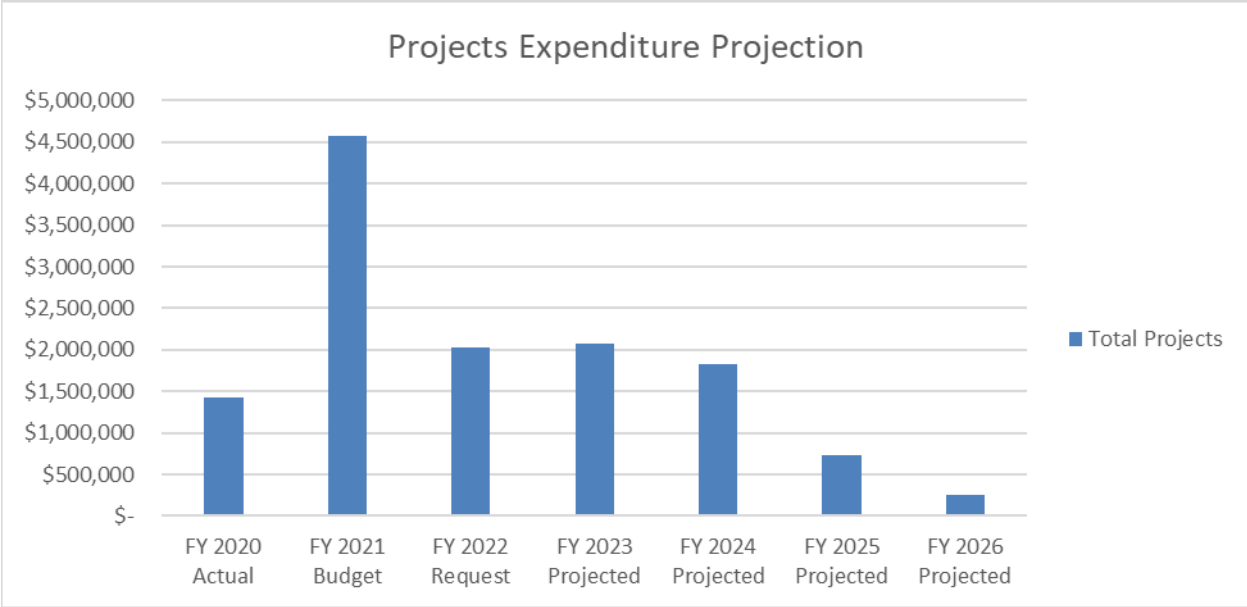
### **BACKGROUND**

Each year the staff prepares a 5-year plan of District's capital and maintenance projects. Only the upcoming year budget is approved by the board, the rest of years' project costs are presented for reference only.

In compliancy with the Generally Accepted Accounting Principles (GAAP), the definition for a capital improvement project is a new construction project or an expansion; major renovation, rehabilitation, and/or replacement project for an existing facility or facilities with a total cost of at least \$5,000 and a useful life of at least 2 years. Project costs can include the cost of land, land improvements, architectural design, engineering, construction, construction management and inspection. Using these criteria all projects were evaluated and categorized either as capital or maintenance. Because the maintenance projects often demand significant time and money resources, they are presented alongside with the capital projects and the staff uses the categorical title of "Project Expenditures" for this component of the budget.

### **DISCUSSION**

The staff has prepared a preliminary budget projection for capital and maintenance projects in FY 2022-2026, prioritizing the projects based on their merit, relative importance to effective operations and cumulative cost. All project costs are estimations and should be used only as a reference for years beyond FY 2022.



The staff anticipates that slightly below \$1.0M of the FY 2021 project appropriations will need to be carried over or re-appropriated in the following year. FY 2022 initial request for new appropriations is totaling approximately \$2.03M. That includes Potable Main Replacement Program, Well 3B Replacement as two of the larger projects.

Submitted,

Piret Harmon  
 General Manager

Enclosed: FY 2022-2026 Projects Budget Projection

SCOTT'S VALLEY WATER DISTRICT																	Draft 3-17-21		
FY 2022 Budget: Projects Program Projections																			
CAPITAL IMPROVEMENT AND MAINTENANCE PROJECTS																			
Category	Project Name	Project Description	Project #	GL #	Cap/Mntce	FY 2020 Actual	FY 2021 Budget	FY 2021 YTD 12/31/20	FY 2021 Est YE Actual	FY 2022 Carryover	FY 2022 Request	FY 2022 Budget	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	TOTAL FY 2022-2026	Notes	
Mains	Main Replacement Program - Potable	Replace and upgrade potable water mains based on leak history, service life, and size	C20010	01-300-15002	Cap		\$ 675,379	\$ 7,572	\$ 10,000	\$ 665,379	\$ 200,000	\$ 865,379	\$ 150,000	\$ 160,000	\$ 170,000	\$ 180,000	\$ 1,525,379	FY21: Design for replacing 1,100 ft of main in 4 locations FY22: Complete FY 2021 main work and replace 400 ft of main in 2 locations (\$500 per ft)	
	Main Replacement Program - Recycled	Replace old, poor condition recycled water main with high pressure rated pipe on Whispering Pines and Mt Hermon (about 1 mile).	C17025	02-300-16002	Cap		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ 250,000	RW main near Valley Gardens: paid by developer
Treatment Plants	Orchard Run Water Treatment Plant Improvements	Implement esthetic taste & odor improvements to treatment process by adding new GAC filter and chlorine analyzer injection system. Infrastructure improvements	C16023	01-300-15002	Cap		\$ 2,113,507	\$ 34,545	\$ 3,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	Complete project in FY21
	El Pueblo Water Treatment Plant Improvements	Replace manual 1980's filter control system with programmable automated control system linked with SCADA.	C19020	01-300-15002	Cap		\$ 56,050	\$ 53,796	\$ 56,050	\$ -	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	FY22: Remove obsolete control equipment and wiring. Complete installation of plant control panel by in-house staff and District SCADA contractor
	Well 10 WTP Water Quality Improvements	Implement esthetic taste & odor improvements by adding additional filter bed and Chlorine analyzer equipment.	tbd	01-300-15002	Cap		\$ 113,000	\$ -	\$ -	\$ -	\$ 0	\$ -	\$ 300,000	\$ -	\$ 500,000	\$ -	\$ -	\$ 800,000	FY23: TP Control System Upgrades FY25: Filter Replacement
	Treatment Facility for New Production Well	New Lompico Formation Production Well and Treatment Plant.	C20020	01-300-15002	Cap		\$ 126,140	\$ -	\$ 45,000	\$ 81,140	\$ 0	\$ 81,140	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 81,140	FY22: Evaluate El Pueblo Treatment Facility for possible treatment requirements for new well at well 6 site.
Tanks	Bethany Tank Rehabilitation	Construct additional tank on-site to allow for roof reconstruction and interior and exterior coating replacement of 400,000 gallon Bethany Tank. Project extends tank service life and provides additional	C16024	01-300-15002	Cap		\$ 244,528	\$ 86,215	\$ 90,000	\$ 154,528	\$ -	\$ 154,528	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ 1,154,528	FY22: design; FY23: construction (\$500K-2M)
	Sequoia Tank Rehabilitation	Recoat roof, interior, and exterior of 1.25 million gallon Sequoia Tank that has the original coating from 1983.			Cap		\$ -	\$ 20,170	\$ 20,170	\$ -	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Pump Stations	Hacienda PS Improvements	Pumps and structure in poor condition and need to be replaced. Pumps are very loud and run 24 hours a day. Noise mitigation and structural upgrades will provide better protection for pumps and motors and reduce noise	C19030	01-300-15002	Cap		\$ 57,728	\$ 128,298	\$ 175,000	\$ -	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	FY22: Install pumps, controls, and backup generator system
	Polo Ranch PS	Polo Ranch flow control station has been modified to provide booster pumping into the Southwood pressure zone when needed. The Southwood Booster station on Granite Creek Road will be retired.	C18033	01-300-15002	Cap		\$ 75,000	\$ 84,494	\$ 100,000	\$ 0	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	To be constructed as part of the Polo Ranch Development project. FY19: flow control station and building construction, FY21: purchase and install pumps (2) and controls.
Wells	Lompico Formation Production Well (Well 9 Replacement)	Construct a new production well that is needed to offset lost production capacity from Well 9 & Well 11A. The replacement well will in part be sited to provide for a more balanced withdrawal rate from the Lompico Aquifer.	C15007	01-300-15002	Cap		\$ 100,000	\$ -	\$ 45,000	\$ -	\$ -	\$ -	\$ 150,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ 1,650,000	FY21: Evaluation of Well 6 Site FY23: Design & permitting FY24: Construction (Shift a year earlier if funds available)
	Well 3B Replacement								\$ 55,000	\$ -	\$ 1,500,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000	FY21: Design; FY22: Permitting & construction
Groundwater Supply	Conjunctive Use with SLVWD or/and SCWD	SLVWD to provide SVWD excess treated surface water in winter when available to reduce pumping and improve groundwater levels in the shared basin.	tbd				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	FY18: SVWD entered into an MOU agreement with SLVWD, SVWD and the County. FY21: develop a scope and initial budget /include in the Operating Budget/
Recycled Water Supply	Purified Recycled Water Recharge	Supplemental supply project to increase groundwater reliability, especially in dry years (climate change related change). Could be shifted to SMGWA or replaced with conjunctive use.	C15021	02-300-16002/ 02-300-16003	Cap		\$ 421,021	\$ 9,159	\$ 9,159	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Feasibility study completed. Consider timing, cost and partnerships. On hold.
	GW Recharge - Grant Reimbursement						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	GW Recharge - Partner Contributions/Short Term						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Recycled Water Fill Station	Carry out a program providing free small quantity (up to 250 gpd) recycled water to eligible customers.	M16022	02-300-16003	Mntce		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Determine if there is need to re-open
Distribution System	Pressure Regulator Station Installation - Granite Creek Estates	Install main line regulator station to reduce 200+ PSI in the distribution system that serves Taryn Ct, Lauren Circ, Traci Ct and section of Granite Cr Rd.	C19050		Cap		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	This improvement benefits 45 residential services and augments the integrity of the District's potable water system. Preliminary design completed FY19. Implementation pending on results of Distribution System Pressure Study
	PR Station - Third Party Contributions						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Meters	Automated Metering Infrastructure (AMI)	Install AMI transmitters on all meters over 3-4 year period.	C17011	01-300-15002/ 01-300-15003	Cap		\$ 170,053	\$ 43,953	\$ 100,000	\$ -	\$ 5,000	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000	FY22: 50 units for inventory and replacements
	Meter Replacement Program	Replace all meters installed before 2012 at the rate of 800-1000 meters per year. Subsequently conduct a regular meter replacement program.	M17011	01-300-15003	Mntce		\$ 75,000	\$ 40,211	\$ 75,000	\$ -	\$ 20,000	\$ 20,000	\$ 20,000	\$ 21,000	\$ 22,000	\$ 23,000	\$ 106,000	\$ 106,000	FY22: Replace Sensus meters 5/8" through 2" as needed

SCOTTS VALLEY WATER DISTRICT																	Draft 3-17-21	
FY 2022 Budget: Projects Program Projections																		
CAPITAL IMPROVEMENT AND MAINTENANCE PROJECTS																		
Category	Project Name	Project Description	Project #	GL #	Cap/Mntce	FY 2020 Actual	FY 2021 Budget	FY 2021 YTD 12/31/20	FY 2021 Est YE Actual	FY 2022 Carryover	FY 2022 Request	FY 2022 Budget	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	TOTAL FY 2022-2026	Notes
Technology	Utility Billing Software Improvements	Improvements and/or enhancements to Utility Billing (UB) and Payment Processing softwares	C15016	01-200-15990	Cap		\$ 26,841	\$ -	\$ -	\$ -	\$ -	\$ -					\$ -	Possible consideration of a third party financial reporting software, utility billing software and payment platform
	SCADA Upgrade								\$ 15,000									
Fleet	Vehicle Replacement Program	Replace aging fleet: one vehicle per year on average, starting FY 2019.	C19070	01-300-15002	Cap		\$ 73,157	\$ 41,066	\$ 83,000	\$ -	\$ 55,000	\$ 55,000	\$ 44,000	\$ 45,000	\$ 46,000	\$ 47,000	\$ 237,000	FY22: Replace 2006 1 ton utility truck. Subsequent years 3/4 ton truck replacement schedule
	Specialized Operations Equipment	Replace heavy equipment and specialized vehicles on as-needed basis.	C17018	01-000-15002	Cap		\$ 215,603	\$ 154,181	\$ 154,181	\$ 61,422	\$ 50,000	\$ 111,422	\$ 85,000	\$ 95,000			\$ 291,422	FY22: 125KW Sandhill/ Well 118 portable generator FY23: Replace and downsize 350kw generator at El Pueblo TP FY24: Replace 500kw generator at Orchard Run TP
Buildings	Administrative Building Improvements	Repairs and modifications to the office facility to support business operations	c20040		Cap		\$ 30,000	\$ 11,081	\$ 25,000	\$ -		\$ -	\$ 75,000				\$ 75,000	FY21: Improvements to the Santa Margarita Community Room: north wall repairs, dias reconfiguration, lighting enhancements FY23: Various facility upgrades, repairs
	<b>Total Projects</b>						\$ 4,573,007	\$ 714,741	\$ 4,557,560	\$ 962,469	\$ 2,030,000	\$ 2,992,469	\$ 2,074,000	\$ 1,821,000	\$ 738,000	\$ 250,000	\$ 7,875,469	
	Less Other Funding						\$ -	\$ -	\$ (3,500,000)	\$ -	\$ -	\$ (2,500,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>Net Projects</b>						\$ 4,573,007	\$ 714,741	\$ 1,057,560	\$ 962,469	\$ 2,030,000	\$ 492,469	\$ 2,074,000	\$ 1,821,000	\$ 738,000	\$ 250,000	\$ 7,875,469	

## **AGENDA REPORT**

Scotts Valley Water District

**Date:** 04/08/21

**To:** Board of Directors

**Item:** Business 6.4

**Subject:** **Budget Assumptions FY 2022**

**Reason:** Supports District Mission and Strategic Goals

### **SUMMARY**

**Recommendation:** Receive information and provide input.

**Fiscal Impact:** No direct impact from this action.

**Previous Related Action:** On 03/17/21 the Finance and Personnel Committee received a report on the FY 2022 budget assumptions.

### **BACKGROUND**

District follows an annual budget cycle with a balanced budget adopted at the June board meeting. The Budget is comprised of the Operating Budget, Debt Service Budget and Projects Budget. The Operating Budget is a line item budget that is organized in functional divisions and major expense categories.

### **DISCUSSION**

One of the first steps of the budget preparation process is to develop a set of assumptions that will be used in generating revenue and expenditure projections. Below are the assumptions for the upcoming fiscal year.

#### Revenue

1. Water sales and water service from existing connections
  - FY 2022 consumption projected based on the 4-year average (FY 2017- FY 2020) with a modest adjustment down to reflect the recent water use efficiency improvements
2. Water sales and water service from new connections
  - Water services revenue will include increases from accounts that connected in FY 2021
3. Rate increases (Basic Meter Charge and Consumption Rates)
  - 5% increase in December 2021
4. Capacity and meter fees from new connections

- Approximately \$1.0 M anticipated, which includes service connections at the following development projects: Polo Ranch, The Hanger

5. Property tax

- 2.0% increase from FY 2021 Estimated Actual (per the Auditor-Controller's Office)

6. Grants

- No outside funding anticipated at this time.

Expense: Salaries and Benefits

1. Salaries

- Non-exempt employees (MOU terms).
  - o 1.72% COLA
  - o Step increases are budgeted
- Exempt employee's compensation adjustment of 3%

2. Health Benefits

- Medical insurance estimated to increase 3.3% based on the 5-year average
  - o 2017: 11.9%; 2018: 4.5%; 2019: 0%; 2020: 0%; 2021: 0%
- Dental, Vision, Life estimated to increase by 3.3% inflation factor

3. Retirement Benefits

- Change to the Required Employer Contribution percentages from FY 2021
  - o Tier 1 (2.7 at 55): 14.3% (down by 0.2%)
  - o Tier 2 (2 at 55): 10.3% (down by 0.1%)
  - o PEPRA (2 at 62): 7.6% (down by 0.1%)
- Unfunded Liability payment of \$215 K (up by 22%)

Debt Service

Total debt service payments will increase \$83,300 from FY 2021 with principal of \$662,832 and interest of \$69,732. Debt Service Coverage Ratio will exceed goal of 1.20. Calculated as net revenue (total revenue less operation and maintenance costs) over debt service payments.

Project Expenditures

Initial proposal of \$2.0 M in new appropriation and \$1.0 M of carryover funding from FY 2021.

Submitted,

Piret Harmon  
General Manager

## **AGENDA REPORT**

Scotts Valley Water District

**Date:** 04/08/21

**To:** Board of Directors

**Item:** Business 6.5

**Subject:** **Water Rate Study Update**

**Reason:** Supports District Mission and Strategic Goals

### **SUMMARY**

**Recommendation:** Receive information and provide input.

**Fiscal Impact:** No direct impact from the work completed so far. The final proposed rate structure and rate schedule will impact the District's operating revenue.

**Previous Related Action:** On 03/17/21 the Finance and Personnel Committee received a presentation from Raftelis Financial Consultants and provided input to certain aspects of the financial model and rate study.

### **DISCUSSION**

Raftelis was hired in October 2020 to conduct a comprehensive rate study. The first phase of the study, analysis of required revenue and development of a Financial Plan, is complete.

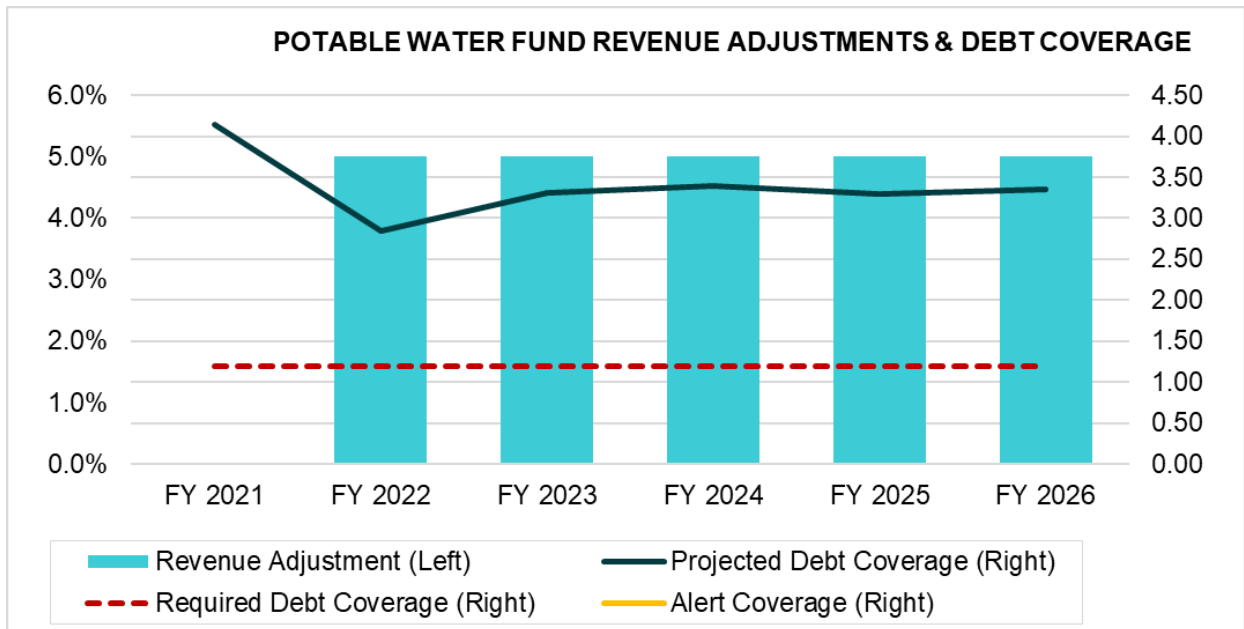
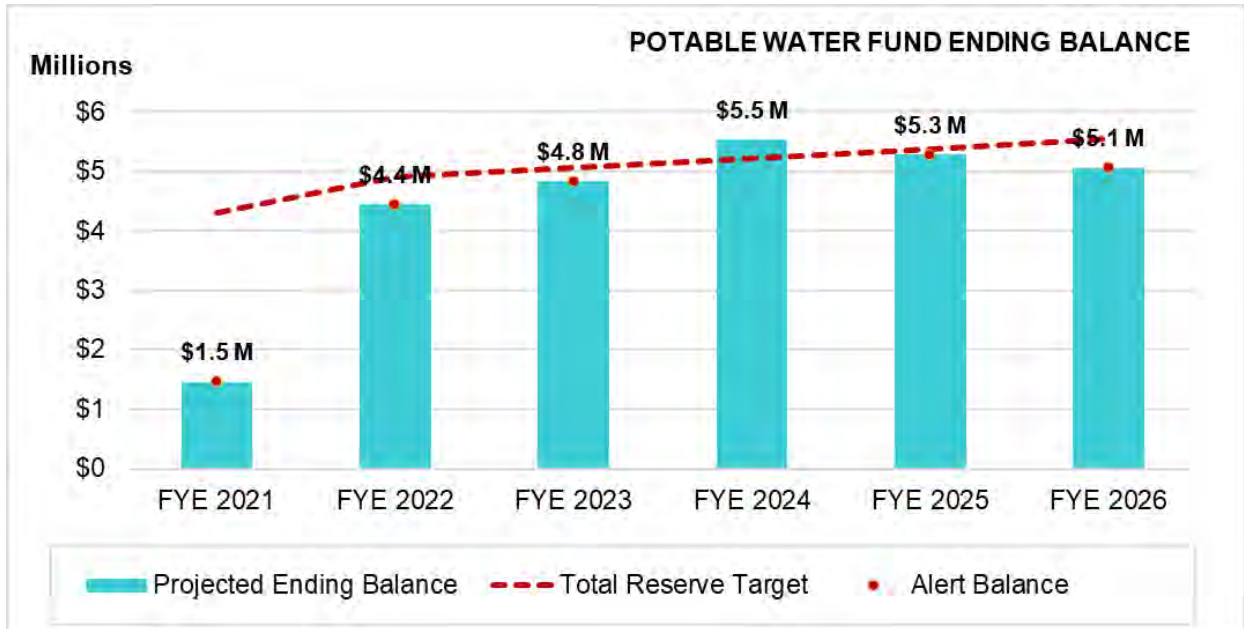
Two Financial Plan scenarios for the Potable Fund were presented to the Finance and Personnel Committee at the March meeting. The first scenario assumed that 100% of new connections would connect when anticipated. With this assumption, the District would need rate increases of 5% annually, a cumulative increase of 25% over five years, to maintain fund balance at the target level.

The second scenario assumed that 50% of new connections would connect when anticipated. With this assumption, the District would need rate increases of 9% annually, a cumulative increase of 45% over five years, to maintain fund balance at the target level.

Subsequent to the Committee meeting, the FY 2022 Projects Budget has been updated. Raftelis prepared a third Financial Plan scenario to reflect the new projects budget. This scenario holds the following assumptions: 50% of new connections, debt issuance increased from \$4M to \$6M to finance a second project, additional \$2M contribution towards the District's unfunded pension liability, and a set-aside of \$1M / year beginning in FY 2025 for a future supplemental supply project.

Under the assumptions of this scenario, the District would need rate increases of 5% annually, a cumulative increase of 25% over five years, in order to maintain fund balance at the target level.

The charts below display Fund Balance and Debt Coverage levels in this scenario.




Staff welcomes feedback on this scenario and the assumptions utilized to develop the scenario.

Submitted,

Piret Harmon  
General Manager

Enclosed: Financial Plan Scenario Table

Financial Plan Scenario Table

POTABLE WATER FUND						
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Revenue Adjustments		5.0%	5.0%	5.0%	5.0%	5.0%
Adjustment Month	January	January	January	January	January	January
Water Sales	994 AF	1,013 AF	1,021 AF	1,032 AF	1,039 AF	1,046 AF
Transfer to Recycled Fund	\$289,515	\$414,575	\$420,916	\$438,828	\$429,332	\$440,978
Additional Supplemental Supply CIP	\$0	\$0	\$0	\$0	\$1,000,000	\$1,000,000
New Debt Proceeds for CIP	\$0	\$6,000,000	\$0	\$0	\$0	\$0
Available Proceeds for CIP	\$3,500,000	\$2,500,000	\$0	\$0	\$0	\$0
Total CIP Expenditures	\$4,534,771	\$2,990,939	\$2,068,625	\$1,801,880	\$2,732,235	\$2,738,075
Use of New Proceeds for CIP	\$3,500,000	\$2,500,000	\$0	\$0	\$0	\$0

## **AGENDA REPORT**

Scotts Valley Water District

**Date:** 04/08/21

**To:** Board of Directors

**Item:** Business 6.6

**Subject:** **Exploration of Possible Consolidation of Scotts Valley Water District (SVWD) and San Lorenzo Valley Water District (SLVWD)**

**Reason:** Supports District Mission

### **SUMMARY**

**Recommendation:** Receive an update and provide input.

**Fiscal Impact:** The impact is unknown at this time.

**Previous Related Action:** On 02/11/21 the Board directed staff to proceed with exploring a possible consolidation of SVWD and SLVWD conditioned upon the San Lorenzo Valley Water District Board of Directors taking the affirmative action to move forward with exploring a possible consolidation.

### **BACKGROUND**

Public agency consolidations involve a lengthy public process administered by Local Agency Formation Commission (LAFCO). LAFCO has authority to review and approve proposals for changes in local government organization, if the proposals are consistent with recommendations or conclusions of a sphere of influence study or other study prepared by LAFCO (Gov. Code 56378, 56425, or 56430).

Staff from SVWD and SLVWD meet regularly to discuss issues of mutual concern and find ways to enhance the efficiency of both agencies. Recently the idea of a potential consolidation was presented to the Board of Directors of both agencies.

### **DISCUSSION**

SLVWD Board discussed the matter on 03/04/21 and directed District Manager Rogers to work with General Manager Harmon in compiling a short list of potential benefits and estimated costs. The staff is providing an update on this activity and welcomes input or additional direction from the SVWD Board.

Submitted,

Piret Harmon  
General Manager

## **STAFF REPORT - Finance**

Scotts Valley Water District

**Date:** 04/08/21  
**To:** Board of Directors  
**From:** General Manager  
**Item:** Staff Reports 7.3  
**Subject:** **Financial Reports 07/01/20 through 2/28/21**

### **Summary**

Fiscal Year-to-Date (YTD) preliminary figures reflect the period of 07/01/20 through 2/28/21. YTD revenues total \$5.6M and expenses total \$5.4M.

### **Revenue**

February is the eighth month of the fiscal year and the second month of the January-February potable water billing period. Preliminary YTD potable water sales revenue is \$2.7M, water services revenue is \$1.4M, new connections revenue is \$499K, and property tax revenue is \$542K. Total YTD revenue in the potable water fund is \$5.2M, equal to 65% of the budget and 2% higher than the same period last year.

YTD recycled water sales revenue is \$326K, water services revenue is \$40K, and no revenue from new connections for the period. Total YTD revenue of \$369K in the recycled water fund equals 49% of the budget, which is 6% lower than for the same period of last fiscal year.

### **Expenses**

Preliminary combined operating expenses YTD are below budget, with expenses of \$3.5M representing 57% of the budget. Project expenditures total \$1.3M and the debt service principal payment of \$567K was made.

### **Fund Balance**

Cash reserves at the end of February were approximately \$4.3M with another \$1.3M booked in Accounts Receivable.

### **Enclosed**

Budget Status Balance 07/01/20 – 2/28/21  
Budget Status Revenue 07/01/20 – 2/28/21  
Budget Status Expense 07/01/20 – 2/28/21  
Projects Expense 07/01/20 – 2/28/21  
Balance Sheet 2/28/21  
Check Register 2/01/21 – 2/28/21

**Budget Status - Balance**



**Period: 07/01/20 - 02/28/21**

**FY Remain: 33%**

	<b>FY 2020 YTD Actual</b>	<b>FY 2021 YTD Actual</b>	<b>FY 2021 vs. FY 2020</b>	<b>YOY % change</b>	<b>FY 2021 Budget</b>	<b>FY 2021 Remaining Balance</b>	<b>%</b>
<b>Period: 07/01/20 - 02/28/21 (8 months)</b>							
<b>Potable Water - Fund 01</b>							
Water Sales & Services (R10, R20)	\$ 4,020,439	\$ 4,111,614	\$ 91,175	2%	\$ 5,952,484	\$ 1,840,870	31%
New Connections (R25)	\$ 421,957	\$ 499,850	\$ 77,894	18%	\$ 786,110	\$ 286,260	36%
Other Revenue (R30, R40)	\$ 625,098	\$ 570,451	\$ (54,647)	-9%	\$ 1,175,391	\$ 604,940	51%
<b>Potable Water Total</b>	<b>\$ 5,067,494</b>	<b>\$ 5,181,916</b>	<b>\$ 114,421</b>	<b>2%</b>	<b>\$ 7,913,985</b>	<b>\$ 2,732,069</b>	<b>35%</b>
<b>Recycled Water - Fund 02</b>							
Water Sales & Services (R10, R20)	\$ 376,904	\$ 365,906	\$ (10,999)	-3%	\$ 547,998	\$ 182,092	33%
New Connections (R25)	\$ 12,978	\$ -	\$ (12,978)	-100%	\$ 32,126	\$ 32,126	100%
Other Revenue (R30, R40)	\$ 2,995	\$ 2,744	\$ (251)	-8%	\$ 177,985	\$ 175,241	98%
<b>Recycled Water Total</b>	<b>\$ 392,877</b>	<b>\$ 368,649</b>	<b>\$ (24,227)</b>	<b>-6%</b>	<b>\$ 758,109</b>	<b>\$ 389,460</b>	<b>51%</b>
<b>TOTAL REVENUE</b>	<b>\$ 5,460,371</b>	<b>\$ 5,550,565</b>	<b>\$ 90,194</b>	<b>2%</b>	<b>\$ 8,672,094</b>	<b>\$ 3,121,529</b>	<b>36%</b>
<b>Expenses - Fund 01 and Fund 02 Combined</b>							
Salaries & Benefits (E01)	\$ 1,915,185	\$ 1,919,779	\$ 4,594	0%	\$ 3,050,085	\$ 1,130,306	37%
Services & Supplies (E03-E80)	\$ 1,713,765	\$ 1,579,812	\$ (133,953)	-8%	\$ 3,074,046	\$ 1,494,234	49%
Project Expenses	\$ 279,204	\$ 1,285,396	\$ 1,006,192	360%	\$ 4,573,007	\$ 3,287,611	72%
Debt Service - Principal	\$ 460,030	\$ 567,298	\$ 107,268	23%	\$ 567,298	\$ -	0%
<b>TOTAL EXPENSES *</b>	<b>\$ 4,368,184</b>	<b>\$ 5,352,285</b>	<b>\$ 984,101</b>	<b>23%</b>	<b>\$ 11,264,436</b>	<b>\$ 5,912,151</b>	<b>52%</b>
<b>NET REVENUE</b>	<b>\$ 1,092,187</b>	<b>\$ 198,280</b>	<b>\$ (893,907)</b>		<b>\$ (2,592,342)</b>	<b>\$ (2,790,622)</b>	
<b>Period: 07/01/20 - 02/28/21 (8 months)</b>							
Total Revenue	\$ 5,460,371	\$ 5,550,565	\$ 90,194	2%	\$ 8,672,094	\$ 3,121,529	36%
Total Expenses *	\$ 4,368,184	\$ 5,352,285	\$ 984,101	23%	\$ 11,264,436	\$ 5,912,151	52%
<b>Net Revenue</b>	<b>\$ 1,092,187</b>	<b>\$ 198,280</b>	<b>\$ (893,907)</b>		<b>\$ (2,592,342)</b>		
<b>Period: 07/01/20 - 01/31/21 (7 months)</b>							
Total Revenue	\$ 5,223,321	\$ 5,090,225	\$ (133,097)	-3%	\$ 8,672,094	\$ 3,581,869	41%
Total Expenses *	\$ 3,827,142	\$ 4,838,923	\$ 1,011,781	26%	\$ 11,264,436	\$ 6,425,513	57%
<b>Net Revenue</b>	<b>\$ 1,396,179</b>	<b>\$ 251,301</b>	<b>\$ (1,144,878)</b>		<b>\$ (2,592,342)</b>		

\* Expense totals do not include depreciation expense

# Budget Status - Revenue



Period: 07/01/20 - 02/28/21

FY Remain: 33%

Fund 01	Potable Water	FY 2020 YTD Actual	FY 2021 YTD Actual	FY 2021 vs. FY 2020	YOY % change	FY 2021 Budget	FY 2021 Remaining Balance	%
R10	Operating Revenue - Water Sales							
01-000-41101	Residential Consumption - SF	\$ 1,483,536	\$ 1,620,109	\$ 136,573	9%	\$ 2,292,073	\$ 671,964	29%
01-000-41102	Residential Consumption - MF	\$ 112,696	\$ 123,976	\$ 11,280	10%	\$ 169,499	\$ 45,523	27%
01-000-41103	CII Consumption	\$ 740,790	\$ 633,680	\$ (107,111)	-14%	\$ 964,099	\$ 330,419	34%
01-000-41106	CII Consumption - Other	\$ 90,021	\$ 52,031	\$ (37,990)	-42%	\$ -	\$ (52,031)	
01-000-41105	Irrigation Consumption	\$ 221,405	\$ 243,089	\$ 21,684	10%	\$ 332,394	\$ 89,305	27%
01-000-41200	Other - Bulk Water	\$ 20,224	\$ 14,940	\$ (5,284)	-26%	\$ 25,745	\$ 10,805	42%
	R10 Sub Totals:	\$ 2,668,673	\$ 2,687,825	\$ 19,152	1%	\$ 3,783,810	\$ 1,095,985	29%
R20	Operating Revenue - Water Services							
01-000-41300	Other - Late Penalty	\$ 16,020	\$ 10,150	\$ (5,870)	-37%	\$ 25,800	\$ 15,650	61%
01-000-42100	Standby Basic Meter Charge	\$ 1,291,410	\$ 1,367,589	\$ 76,180	6%	\$ 2,074,649	\$ 707,060	34%
01-000-42121	Standby FP Basic Meter Charge	\$ 37,362	\$ 40,351	\$ 2,988	8%	\$ 57,725	\$ 17,374	30%
01-000-43300	Other Operating Revenue	\$ 6,975	\$ 5,700	\$ (1,275)	-18%	\$ 10,500	\$ 4,800	46%
	R20 Sub Totals:	\$ 1,351,767	\$ 1,423,790	\$ 72,023	5%	\$ 2,168,674	\$ 744,884	34%
R25	Operating Revenue - New Connections							
01-000-42101	Other Meter Fee	\$ 6,452	\$ 6,025	\$ (427)	-7%	\$ 12,891	\$ 6,866	53%
01-000-42102	Other Capacity Fee	\$ 407,764	\$ 490,562	\$ 82,798	20%	\$ 761,528	\$ 270,966	36%
01-000-42120	Other FP Meter Fee	\$ 2,512	\$ 472	\$ (2,040)	-81%	\$ 4,691	\$ 4,219	90%
01-000-43100	Other Will Serve	\$ 875	\$ 625	\$ (250)	-29%	\$ 1,000	\$ 375	38%
01-000-43200	Other Dev Proj Review	\$ 4,354	\$ 2,166	\$ (2,187)	-50%	\$ 6,000	\$ 3,834	64%
	R25 Sub Totals:	\$ 421,957	\$ 499,850	\$ 77,894	18%	\$ 786,110	\$ 286,260	36%
R30	Non-Operating Revenue - Other							
01-000-46000	Property Taxes	\$ 531,306	\$ 542,334	\$ 11,028	2%	\$ 1,077,212	\$ 534,878	50%
01-000-47110	Interest & Dividend	\$ 19	\$ 8	\$ (11)	-60%	\$ 21	\$ 14	64%
01-000-47120	Interest - LAIF	\$ 16,897	\$ 10,861	\$ (6,036)	-36%	\$ 52,500	\$ 41,639	79%
01-000-47520	Misc. Non-Operating Revenue	\$ 76,877	\$ (3,918)	\$ (80,795)	-105%	\$ 45,658	\$ 49,576	109%
01-000-47550	Third-Party Reimbursements	\$ -	\$ 20,657	\$ 20,657		\$ -	\$ (20,657)	
	R30 Sub Totals:	\$ 625,098	\$ 569,941	\$ (75,814)	-9%	\$ 1,175,391	\$ 626,107	53%
R40	Non-Operating Revenue - Grants							
01-000-45260	Local Grant - ACWA JPIA	\$ -	\$ 510	\$ 510		\$ -	\$ (510)	
	R40 Sub Totals:	\$ -	\$ 510	\$ 510		\$ -	\$ (510)	
	<b>Fund 01 Revenue:</b>	<b>\$ 5,067,494</b>	<b>\$ 5,181,916</b>	<b>\$ 93,764</b>	<b>2%</b>	<b>\$ 7,913,985</b>	<b>\$ 2,752,726</b>	<b>35%</b>
	Fund 01 Rev Excl Grants & Cap Contributions	\$ 5,067,494	\$ 5,181,406	\$ 93,254	2%	\$ 7,913,985	\$ 2,753,236	35%

Assumed \$330K negative adjustment due to COVID

# Budget Status - Revenue



Period: 07/01/20 - 02/28/21

FY Remain: 33%

		FY 2020 YTD Actual	FY 2021 YTD Actual	FY 2021 vs. FY 2020	YOY % change	FY 2021 Budget	FY 2021 Remaining Balance	%
<b>Fund 02</b>	<b>Recycled Water</b>							
R10	Operating Revenue - Water Sales							
02-000-41105	Irrigation Consumption	\$ 346,598	\$ 313,035	\$ (33,563)	-10%	\$ 482,653	\$ 169,618	35%
02-000-41200	Other - Bulk Water	\$ 3,835	\$ 13,359	\$ 9,524	248%	\$ -	\$ (13,359)	
	R10 Sub Totals:	\$ 350,432	\$ 326,394	\$ (24,039)	-7%	\$ 482,653	\$ 156,259	32%
R20	Operating Revenue - Water Services							
02-000-42100	Standby Basic Meter Charge	\$ 26,472	\$ 39,437	\$ 12,965	49%	\$ 65,345	\$ 25,908	40%
02-000-43300	Other Operating Revenue	\$ -	\$ 75	\$ 75		\$ -	\$ (75)	
	R20 Sub Totals:	\$ 26,472	\$ 39,512	\$ 13,040	49%	\$ 65,345	\$ 25,833	40%
R25	Operating Revenue - New Connections							
02-000-42101	Other Meter Fee	\$ 300	\$ -	\$ (300)	0%	\$ 825	\$ 825	100%
02-000-42102	Other Capacity Fee	\$ 12,678	\$ -	\$ (12,678)	-100%	\$ 31,301	\$ 31,301	100%
	R25 Sub Totals:	\$ 12,978	\$ -	\$ (12,978)	-100%	\$ 32,126	\$ 32,126	100%
R30	Non-Operating Revenue - Other							
02-000-47110	Interest & Dividend	\$ 2,995	\$ 2,324	\$ (671)	-22%	\$ 8,573	\$ 6,249	73%
02-000-47520	Other Non-Operating Revenue	\$ -	\$ 420	\$ 420		\$ -	\$ (420)	
02-000-47560	Reduction of RW Entitlement	\$ -	\$ -	\$ -		\$ 169,412	\$ 169,412	100%
	R30 Sub Totals:	\$ 2,995	\$ 2,744	\$ (251)	-8%	\$ 177,985	\$ 175,241	98%
	<b>Fund 02 Revenue:</b>	<b>\$ 392,877</b>	<b>\$ 368,649</b>	<b>\$ (24,227)</b>	<b>-6%</b>	<b>\$ 758,109</b>	<b>\$ 389,460</b>	<b>51%</b>
	Fund 02 Rev Excl Grants & Cap Contributions	\$ 392,877	\$ 368,649	\$ (24,227)	-6%	\$ 758,109	\$ 389,460	51%
	<b>Revenue Totals:</b>	<b>\$ 5,460,371</b>	<b>\$ 5,550,565</b>	<b>\$ 69,537</b>	<b>2%</b>	<b>\$ 8,672,094</b>	<b>\$ 3,142,186</b>	<b>36%</b>
	Revenue Total Excl Grants & Cap Contributions	\$ 5,460,371	\$ 5,550,055	\$ 69,027	2%	\$ 8,672,094	\$ 3,142,696	36%

# Budget Status - Expense



Period: 07/01/20 - 02/28/21

FY Remain: 33%

		FY 2020 YTD Actual	FY 2021 YTD Actual	FY 2021 vs. FY 2020	YOY % change	FY 2021 Budget	FY 2021 Remaining Balance	%
<b>Fund 01 and Fund 02 Combined</b>								
<b>Dept</b>	<b>Administration</b>							
E01	Salaries & Benefits	\$ 401,012	\$ 426,022	\$ 25,010	6%	\$ 641,272	\$ 215,250	34%
E03	General & Admin - Services	\$ 189,651	\$ 187,899	\$ (1,752)	-1%	\$ 470,819	\$ 282,920	60%
E05	General & Admin - Supplies	\$ 15,000	\$ 5,268	\$ (9,732)	-65%	\$ 17,200	\$ 11,932	69%
E10	Source of Supply	\$ 296,472	\$ 291,061	\$ (5,411)	-2%	\$ 330,490	\$ 39,429	12%
E70	Other	\$ -	\$ -	\$ -		\$ 5,000	\$ 5,000	100%
	<b>Dept 100 Sub Totals:</b>	<b>\$ 902,136</b>	<b>\$ 910,251</b>	<b>\$ 8,115</b>	<b>1%</b>	<b>\$ 1,464,781</b>	<b>\$ 554,530</b>	<b>38%</b>
<b>Dept</b>	<b>Finance/Customer Service</b>							
E01	Salaries & Benefits	\$ 361,123	\$ 377,311	\$ 16,188	4%	\$ 563,967	\$ 186,656	33%
E03	General & Admin - Services	\$ 100,811	\$ 111,173	\$ 10,362	10%	\$ 210,163	\$ 98,990	47%
E05	General & Admin - Supplies	\$ 200	\$ -	\$ (200)	-100%	\$ 4,000	\$ 4,000	100%
E35	Customer Accounts	\$ 119,232	\$ 125,996	\$ 6,764	6%	\$ 207,113	\$ 81,117	39%
E70	Other	\$ 1,174	\$ 1,029	\$ (145)	-12%	\$ 1,038	\$ 9	1%
E80	Debt Service - Interest	\$ 43,083	\$ 37,902	\$ (5,180)	-12%	\$ 75,863	\$ 37,961	50%
	<b>Dept 200 Sub Totals:</b>	<b>\$ 625,623</b>	<b>\$ 653,412</b>	<b>\$ 27,789</b>	<b>4%</b>	<b>\$ 1,062,144</b>	<b>\$ 408,732</b>	<b>38%</b>
<b>Dept</b>	<b>Operations</b>							
E01	Salaries & Benefits	\$ 1,023,869	\$ 990,256	\$ (33,613)	-3%	\$ 1,619,059	\$ 628,803	39%
E03	General & Admin - Services	\$ 136,415	\$ 104,382	\$ (32,032)	-23%	\$ 205,260	\$ 100,878	49%
E05	General & Admin - Supplies	\$ 22,324	\$ 23,918	\$ 1,593	7%	\$ 17,000	\$ (6,918)	-41%
E07	General Production	\$ 74,478	\$ 76,385	\$ 1,907	3%	\$ 97,000	\$ 20,615	21%
E10	Source of Supply	\$ 111,947	\$ 15,054	\$ (96,894)	-87%	\$ 130,000	\$ 114,946	88%
E15	Pumping	\$ 292,520	\$ 241,493	\$ (51,027)	-17%	\$ 513,400	\$ 271,907	53%
E20	Water Treatment	\$ 182,207	\$ 134,026	\$ (48,181)	-26%	\$ 430,000	\$ 295,974	69%
E25	Transmission & Distribution	\$ 59,266	\$ 90,946	\$ 31,681	53%	\$ 131,200	\$ 40,254	31%
E70	Other	\$ 21,619	\$ 99,685	\$ 78,066	361%	\$ -	\$ (99,685)	
	<b>Dept 300 Sub Totals:</b>	<b>\$ 1,924,644</b>	<b>\$ 1,776,145</b>	<b>\$ (148,499)</b>	<b>-8%</b>	<b>\$ 3,142,919</b>	<b>\$ 1,366,774</b>	<b>43%</b>
<b>Dept</b>	<b>Engineering</b>							
E01	Salaries & Benefits	\$ 60,316	\$ 64,792	\$ 4,475	7%	\$ 105,710	\$ 40,918	39%
E03	General & Admin - Services	\$ 41,086	\$ 33,244	\$ (7,842)	-19%	\$ 189,900	\$ 156,656	82%
E05	General & Admin - Supplies	\$ -	\$ -	\$ -		\$ 1,000	\$ 1,000	100%
	<b>Dept 400 Sub Totals:</b>	<b>\$ 101,402</b>	<b>\$ 98,035</b>	<b>\$ (3,367)</b>	<b>-3%</b>	<b>\$ 296,610</b>	<b>\$ 198,575</b>	<b>67%</b>
<b>Dept</b>	<b>Board of Directors</b>							
E01	Salaries & Benefits	\$ 68,865	\$ 61,399	\$ (7,466)	-11%	\$ 120,077	\$ 58,678	49%
E03	General & Admin - Services	\$ 6,280	\$ 350	\$ (5,930)	-94%	\$ 22,800	\$ 22,450	98%
E05	General & Admin - Supplies	\$ -	\$ -	\$ -		\$ 800	\$ 800	100%
	<b>Dept 900 Sub Totals:</b>	<b>\$ 75,145</b>	<b>\$ 61,749</b>	<b>\$ (13,396)</b>	<b>-18%</b>	<b>\$ 143,677</b>	<b>\$ 81,928</b>	<b>57%</b>

Increase planned - higher CalPERS UAL payments

Capacity Buy-Back (1x 1" and 1 x 5/8")

# Budget Status - Expense



Period: 07/01/20 - 02/28/21

FY Remain: 33%

		FY 2020 YTD Actual	FY 2021 YTD Actual	FY 2021 vs. FY 2020	YOY % change	FY 2021 Budget	FY 2021 Remaining Balance	%
<b>Summary</b>								
E01	Salaries & Benefits	\$ 1,915,185	\$ 1,919,779	\$ 4,594	0%	\$ 3,050,085	\$ 1,130,306	37%
E03	General & Admin - Services	\$ 474,243	\$ 437,048	\$ (37,195)	-8%	\$ 1,098,942	\$ 661,894	60%
E05	General & Admin - Supplies	\$ 37,525	\$ 29,186	\$ (8,339)	-22%	\$ 40,000	\$ 10,814	27%
E07	General Production	\$ 74,478	\$ 76,385	\$ 1,907	3%	\$ 97,000	\$ 20,615	21%
E10	Source of Supply	\$ 408,420	\$ 306,115	\$ (102,305)	-25%	\$ 460,490	\$ 154,375	34%
E15	Pumping	\$ 292,520	\$ 241,493	\$ (51,027)	-17%	\$ 513,400	\$ 271,907	53%
E20	Water Treatment	\$ 182,207	\$ 134,026	\$ (48,181)	-26%	\$ 430,000	\$ 295,974	69%
E25	Transmission & Distribution	\$ 59,266	\$ 90,946	\$ 31,681	53%	\$ 131,200	\$ 40,254	31%
E35	Customer Accounts	\$ 119,232	\$ 125,996	\$ 6,764	6%	\$ 208,151	\$ 81,125	39%
E70	Other	\$ 22,793	\$ 100,714	\$ 77,921	342%	\$ 5,000	\$ (99,685)	-1994%
E80	Debt Service - Interest	\$ 43,083	\$ 37,902	\$ (5,180)	-12%	\$ 75,863	\$ 37,961	50%
	Purchase Order Carryover					\$ 14,000		
<b>District Expense Total:</b>		<b>\$ 3,628,950</b>	<b>\$ 3,499,592</b>	<b>\$ (129,358)</b>	<b>-4%</b>	<b>\$ 6,124,131</b>	<b>\$ 2,605,539</b>	<b>43%</b>
<b>Fund 01 and 02 Combined</b>								
E01	Salaries & Benefits	\$ 1,915,185	\$ 1,919,779	\$ 4,594	0%	\$ 3,050,085	\$ 1,130,306	37%
E03-E80	Services & Supplies	\$ 1,713,765	\$ 1,579,812	\$ (133,953)	-8%	\$ 3,060,046	\$ 1,480,234	48%
	Purchase Order Carryover					\$ 14,000		
<b>District Expense Total:</b>		<b>\$ 3,628,950</b>	<b>\$ 3,499,592</b>	<b>\$ (129,358)</b>	<b>-4%</b>	<b>\$ 6,124,131</b>	<b>\$ 2,610,539</b>	<b>43%</b>

# Projects - Expense



Period: 07/01/20 - 02/28/21

FY Remain: 33%

		FY 2021 YTD Actual	FY 2021 Budget *	FY 2021 Remaining Balance	%
<b>Fund 01 and Fund 02 Combined</b>					
<b>Project</b>	<b>Description</b>				
C15016	Utility Billing Software Improvements	\$ -	\$ 26,841	\$ 26,841	100%
C15021	Purified Recycled Water Recharge	\$ 9,159	\$ 421,021	\$ 411,863	98%
C16023	Orchard Run WTP Water Quality Improvements	\$ 571,649	\$ 2,113,507	\$ 1,541,858	73%
C16024	Bethany Tank Rehabilitation	\$ 86,459	\$ 244,528	\$ 158,069	65%
M17011	Meters with AMI	\$ 41,006	\$ 75,000	\$ 33,994	45%
C17011	AMI Technology for Meters	\$ 43,953	\$ 170,053	\$ 126,100	74%
C17018	Specialized Operations Vehicle	\$ 154,181	\$ 215,603	\$ 61,422	28%
C18033	Polo Ranch Pump Station Improvements	\$ 105,014	\$ 75,000	\$ (30,014)	-40%
C18035	Sequoia Tank Rehabilitation	\$ 20,170	\$ -	\$ (20,170)	
C19020	El Pueblo WTP Improvements	\$ 55,979	\$ 56,050	\$ 71	0%
C19030	Hacienda Pump Station Improvements	\$ 130,958	\$ 57,728	\$ (73,230)	-127%
C19070	Vehicle Replacement Program	\$ 41,066	\$ 73,157	\$ 32,091	44%
C20010	Main Replacement Program - PW	\$ 14,722	\$ 675,379	\$ 660,657	98%
C20020	Treatment Facility for New Formation Well	\$ -	\$ 126,140	\$ 126,140	100%
C20040	Administrative Building Improvements	\$ 11,081	\$ 30,000	\$ 18,919	63%
TBD	Well 10 WTP Water Quality Improvements	\$ -	\$ 113,000	\$ 113,000	100%
TBD	Lompico Formation Production Well (Well 9)	\$ -	\$ 100,000	\$ 100,000	100%
<b>Projects Expense Totals:</b>		<b>\$ 1,285,396</b>	<b>\$ 4,573,007</b>	<b>\$ 3,287,611</b>	<b>72%</b>

\* Budget amounts include carryover funds from the prior year

# Balance Sheet



## Fund 01 and Fund 02 Combined

	2/29/20	2/28/21
<b>Assets</b>		
Cash	\$3,946,418	\$4,323,250
Accrued Interest	\$314	\$4,565
A/R Customer-Water	\$1,075,497	\$1,339,156
A/R - Other	\$255,163	\$195,967
Interfund Loan Receivable	\$888,040	\$888,040
Inventory	\$232,601	\$271,380
Prepaid Expense	\$63,200	\$70,323
Note Receivable	\$229,412	\$70,000
JPA Investment	\$332,010	\$387,112
Land & Right-of-ways	\$650,697	\$650,697
Construction-in-progress	\$707,116	\$1,824,342
Water Rights / Intangible Assets	\$5,267,833	\$5,267,833
Plant & Equipment	\$38,053,522	\$39,131,437
Depreciation/Amortization	(\$22,757,538)	(\$23,827,288)
Deferred Pension Outflows	\$680,989	\$694,399
Unfunded OPEB Liability	\$153,549	\$142,970
	<b>\$29,778,823</b>	<b>\$31,434,182</b>
<b>Liabilities</b>		
A/P & Accrued Expenses	\$2,909	\$34,529
Accrued Salaries & Wages	\$0	\$0
Accrued Interest Payable	\$2,000	\$0
Customer Deposits	\$62,210	\$41,210
Interfund Loans	\$888,040	\$888,040
LT Liabilities Due in 1 Yr	\$30,508	\$40,998
Unearned Revenue	\$69,137	\$62,293
Long-term Liabilities	\$9,589,006	\$8,773,238
Deferred Pension Inflows	\$212,281	\$215,460
	<b>\$10,856,091</b>	<b>\$10,055,768</b>
<b>Fund Balance</b>		
Investment in Capital Assets	\$16,974,413	\$17,684,486
Unrestricted Net Position	\$116,146	\$1,642,955
	<b>\$17,090,559</b>	<b>\$19,327,441</b>
Total Liabilities and Fund Balance:	\$27,946,650	\$29,383,209
Total Retained Earnings:	\$1,832,173	\$2,050,974
Total Fund Balance and Retained Earnings:	\$18,922,732	\$21,378,414
<b>Total Liabilities, Fund Balance, and Retained Earnings:</b>	<b>\$29,778,823</b>	<b>\$31,434,182</b>

Scotts Valley Water District  
AP Check Register  
February 2021

Vendor Name	Check Date	Check No.	Check Amount	Description
1440 DEVCO LLC	2/12/2021	29602	\$ 1,387.00	SA-79 Deposit - Refund Remainder
ACWA/JPIA	2/4/2021	29560	\$ 7,089.18	WC Insurance - Qtr ending 12/31/2020
ACWA/JPIA	2/12/2021	29603	\$ 38,531.47	EE and Retiree Benefits - Mar 2021
AFLAC	2/12/2021	29604	\$ 412.81	EE Self-Funded Supplemental Benefits - Jan 2021
BAYSIDE EQUIPMENT COMPANY	2/12/2021	29605	\$ 2,593.00	Generator Rental - Well 11B - Jan 2021
BAYSIDE EQUIPMENT COMPANY	2/12/2021	29605	\$ 2,408.00	Generator Rentals - Hacienda & Bethany Boosters - Jan 2021
BECKER SCOTT	2/12/2021	29606	\$ 158.96	SA-124 Deposit - Refund Remainder
BRASS KEY LOCKSMITH	2/4/2021	29561	\$ 725.83	Facility Maint - Locks & Shackles
BRENNTAG PACIFIC INC	2/4/2021	29562	\$ 2,677.86	Water Treatment Chemicals
BUSINESS WITH PLEASURE	2/12/2021	29607	\$ 41.43	Office Supplies - Misc
CENTRAL WATER DISTRICT	2/4/2021	29563	\$ 4.56	SCC Conservation Coalition Overpayment Refund - Central Water
CITY OF SCOTTS VALLEY	2/4/2021	29564	\$ 92.98	Bi-Monthly Sewer Service - El Pueblo
CITY OF SCOTTS VALLEY	2/4/2021	29564	\$ 9,955.66	Bi-Monthly Treatment Disposal - Well 10
CITY OF SCOTTS VALLEY	2/4/2021	29564	\$ 92.98	Bi-Monthly Sewer Service - 2 Civic Ctr
CITY OF SCOTTS VALLEY	2/4/2021	29565	\$ 2,600.00	Sewer Permit & Inspection Fees
CITY OF SCOTTS VALLEY	2/12/2021	29608	\$ 90.00	Bacti Samples - Dec 2020
CIVIL CONSULTANTS GROUP INC	2/12/2021	29609	\$ 515.00	General Engineering Services - Jan 2021
CIVIL CONSULTANTS GROUP INC	2/12/2021	29609	\$ 880.00	SA-170 Plan Review
COAST EQUINE VETERINARY SERVICES	2/12/2021	29610	\$ 367.90	SA-150 Deposit - Refund Remainder
COUNTY OF SANTA CRUZ	2/12/2021	29611	\$ 571.05	Landfill Waste - Jan 2021
DASSELS PETROLEUM	2/12/2021	29612	\$ 1,829.74	Vehicle Fuel / Generator Propane - Jan 2021
DYNAMIC FUEL SOLUTIONS	2/4/2021	29566	\$ 699.44	Vehicle Maint - Backhoe Fuel Polishing & Analysis
EUROFINS EATON ANALYTICAL	2/12/2021	29613	\$ 430.00	Lab Testing for Water Quality
EXCEEDIO	2/4/2021	29567	\$ 495.22	Office Equipment - OPS Printer
EXCEEDIO	2/4/2021	29567	\$ 5,218.50	Monthly Managed Services: HaaS/SaaS/ITaaS - Feb 2021
EXCEEDIO	2/4/2021	29567	\$ 1,014.00	Monthly Managed Services: SCADA - Feb 2021
FIRST ALARM	2/4/2021	29568	\$ 200.06	Fire Alarm Service - Replace Batteries
FISHER MAYDENE	2/12/2021	29614	\$ 50.00	Customer Rebate - Pressure Regulator
GOVERNMENT FINANCE OFFICERS ASSOC	2/4/2021	29569	\$ 460.00	FY2020 CAFR Award Application Fee
GRAINER	2/4/2021	29570	\$ 33.62	OPS Supplies - Hand Towels
GRAINER	2/4/2021	29570	\$ 54.76	Small Tools - Tubing Cutter
GRAINER	2/4/2021	29570	\$ 700.25	OPS Shelving Cabinet
GREEN WASTE RECOVERY INC	2/12/2021	29615	\$ 257.36	Trash Service - El Pueblo - Jan 2021
GUTTERPATROL & WINDOWSHINE	2/12/2021	29616	\$ 2,350.00	Roof Gutter & Downspout Cleaning - Southwood & MacDorsa Tanks
HACH COMPANY	2/4/2021	29571	\$ 1,373.06	Chlorine Analyzer Repair
HARRINGTON INDUSTRIAL PLASTICS LLC	2/4/2021	29572	\$ 796.16	WTP Maint - Fittings & Adapters
HEALTHQUITY INC	2/12/2021	29617	\$ 35.40	HSA Admin Fees - Feb 2021
ICON CLOUD SOLUTIONS LLC	2/12/2021	29618	\$ 120.93	Phone Service - OPS - Feb 2021
ICON CLOUD SOLUTIONS LLC	2/12/2021	29618	\$ 342.39	Phone Service - Feb 2021
ICONIX WATERWORKS (US) INC	2/4/2021	29573	\$ 689.03	Polo Ranch PS Upgrades - Saddle Clamps
ICONIX WATERWORKS (US) INC	2/4/2021	29573	\$ 526.80	Meter Maint - Gaskets
INDEPENDENT ELECTRIC SUPPLY	2/4/2021	29574	\$ 101.47	Polo Ranch PS Upgrades - Phase Converter Hardware
INDEPENDENT ELECTRIC SUPPLY	2/4/2021	29574	\$ 96.15	Small Tools - Misc
INFOSEND	2/4/2021	29575	\$ 247.34	UB Past Due Printing & Mailing - Jan 2021
JACKSON LANDSCAPE	2/12/2021	29619	\$ 357.50	Landscape Maint - 2 Civic Ctr - Jan 2021
KBA DOCUMENT SOLUTIONS LLC	2/4/2021	29576	\$ 113.12	Copier Maint & Printing Costs - Jan 2021
KBA DOCUSYS INC	2/4/2021	29577	\$ 396.50	Copier Lease - Jan 2021
KIASKI GARY	2/4/2021	29578	\$ 200.00	Customer Rebate - Toilets
LANG ED	2/12/2021	29620	\$ 100.00	Customer Rebate - Toilet
LAUNCH BRIGADE	2/12/2021	29621	\$ 455.00	Website Maint - Repair Links
LAW OFFICE OF ROBERT E BOSSO	2/12/2021	29622	\$ 3,000.00	Legal Counsel Services - Jan 2021
LIEBERT CASSIDY WHITMORE	2/4/2021	29579	\$ 30.00	HR Consulting Services - Nov 2020
MILLER MAXFIELD INC	2/12/2021	29623	\$ 4,487.50	Communication / Public Outreach Services - Jan 2021
MISSION UNIFORM SERVICE	2/4/2021	29580	\$ 383.12	Uniform Laundering & Rental Service - Jan 2021
MONTESSORI COMMUNITY SCHOOL	2/12/2021	29624	\$ 244.32	SA-145 Deposit - Refund Remainder
MONTGOMERY & ASSOCIATES INC	2/4/2021	29581	\$ 3,675.00	2020 Annual GW Report - Dec 2020
MONTGOMERY & ASSOCIATES INC	2/4/2021	29581	\$ 1,552.50	On-Call Tech Support - Dec 2020
NAPA AUTO PARTS	2/4/2021	29582	\$ 66.40	WTP Maint - Antifreeze & Drip Pan
NAPA AUTO PARTS	2/4/2021	29582	\$ 74.99	Vehicle Maint - Wipers & Sunshade - Truck #21
NATIONWIDE RETIREMENT SOLUTIONS	2/4/2021	29583	\$ 2,958.86	IRS 457 Plan - Payroll Date 1/25/2021
NATIONWIDE RETIREMENT SOLUTIONS	2/12/2021	29625	\$ 2,958.86	IRS 457 Plan - Payroll Date 2/12/2021
NOVAKOVICH KAREN	2/4/2021	29584	\$ 778.75	Customer Rebate - Lawn Replacement / Low Volume Irrigation
PACIFIC GAS & ELECTRIC	2/4/2021	29585	\$ 65.66	Electricity - Skypark - Jan 2021
PACIFIC GAS & ELECTRIC	2/12/2021	29626	\$ 14.94	Electricity - Santas Village Rd - Jan 2021
PALACE BUSINESS SOLUTIONS	2/4/2021	29586	\$ 375.43	OPS Office Supplies - Printer Ink, Paper, Coffee
PALACE BUSINESS SOLUTIONS	2/4/2021	29586	\$ 66.99	Office Supplies - Pens
PIED PIPER EXTERMINATORS	2/4/2021	29587	\$ 260.00	Pest Control @ Pump Buildings - Jan 2021
PINGFAI LI	2/12/2021	29627	\$ 25.00	Customer Rebate - Toilet
PRESS BANNER	2/4/2021	29588	\$ 252.00	SV Banner Ad - 11/13

Scotts Valley Water District  
 AP Check Register  
 February 2021

Vendor Name	Check Date	Check No.	Check Amount	Description
PRESS BANNER	2/4/2021	29588	\$ 252.00	SV Banner Ad - 1/1
RAFTELIS FINANCIAL CONSULTANTS INC	2/4/2021	29589	\$ 887.50	Water Rate Study - Project Initiation/Mgmt & Data Collection
RAFTELIS FINANCIAL CONSULTANTS INC	2/4/2021	29589	\$ 3,148.75	Water Rate Study - Financial Plan Development
RAIN FOR RENT	2/4/2021	29590	\$ 1,615.62	Orchard Run WTP Improvements - Storage Tank Rentals
RASCHIG USA INC	2/4/2021	29591	\$ 10,877.10	Orchard Run WTP Air Tower Media
SAFETY-KLEEN SYSTEMS	2/4/2021	29592	\$ 458.78	Used Diesel Container & Removal
SAFETY-KLEEN SYSTEMS	2/4/2021	29592	\$ 3,348.29	Asbestos Cement Debris Removal
SANTA CRUZ COUNTY PARKS DEPARTMENT	2/4/2021	29593	\$ 8.50	County Parks Parcel Tax - FY2021
SCARBOROUGH LUMBER & BUILDING SUPPLY	2/12/2021	29628	\$ 31.59	Polo Ranch PS Upgrades - Cables
SCARBOROUGH LUMBER & BUILDING SUPPLY	2/12/2021	29628	\$ 285.92	OPS Supplies - Sprayer Gloves Fuel Mix Misc
SCARBOROUGH LUMBER & BUILDING SUPPLY	2/12/2021	29628	\$ 60.27	Small Tools - PVC Saw & Extension Bars
SCARBOROUGH LUMBER & BUILDING SUPPLY	2/12/2021	29628	\$ 16.45	Office Supplies - Trash Bags
SCARBOROUGH LUMBER & BUILDING SUPPLY	2/12/2021	29628	\$ 17.31	Vehicle Maint - Cleaning Supplies
SOIL CONTROL LAB	2/4/2021	29594	\$ 757.00	Water Quality Testing
SPRINGBROOK HOLDING COMPANY LLC	2/12/2021	29629	\$ 2,061.00	CC Payment Transaction Fees - Jan 2021
STEVENSON LANDSCAPING	2/4/2021	29595	\$ 750.00	Landscaping @ Misc Locations - Jan 2021
SWRCB-DWOCP	2/12/2021	29630	\$ 90.00	D3 Cert Renewal - Beatton
SYCAL ENGINEERING INC	2/12/2021	29631	\$ 3,215.00	Polo Ranch PS Upgrades - Panel Upgrades
SYCAL ENGINEERING INC	2/12/2021	29631	\$ 6,292.75	Orchard Run WTP Improvements - Panel Upgrades
SYCAL ENGINEERING INC	2/12/2021	29631	\$ 4,036.68	Engineering Services for SCADA - Jan 2021
UNITED SITE SERVICES	2/4/2021	29597	\$ 469.54	Portable Toilet Rental - 229 Mt Hermon - Nov 2020 & Jan 2021
UNITED SITE SERVICES	2/4/2021	29597	\$ 121.84	Bethany 2nd Tank Addition - Temp Fence Rental
UNITED SITE SERVICES	2/4/2021	29597	\$ 466.46	Portable Toilet Rental - Orchard Run WTP - Jan - Feb 2021
UNIVERSAL BUILDING SERVICES	2/12/2021	29632	\$ 497.00	Janitorial Service - 2 Civic Ctr - Jan 2021
UNIVERSAL BUILDING SERVICES	2/12/2021	29632	\$ 403.00	Janitorial Service - El Pueblo - Jan 2021
USABLUEBOOK	2/4/2021	29598	\$ 98.10	Safety Clothing - Hi-Vis Pants
USABLUEBOOK	2/4/2021	29598	\$ 160.94	Pump Packing
VALERO FLEET	2/4/2021	29599	\$ 46.79	Vehicle Fuel - Jan 2021
VERIZON WIRELESS	2/4/2021	29600	\$ 311.97	Cell Phones / Tablets - Jan 2021
WATER SYSTEMS CONSULTING INC	2/4/2021	29601	\$ 2,012.50	Urban Water Mgmt Plan - Kickoff / Preliminary Work - Dec 2020
WEBSOFT DEVELOPERS INC	2/12/2021	29633	\$ 5,500.00	GIS Maint - ArcGIS Annual Subscription
			<b>\$ 160,508.44</b>	

Wire / ACH Payments  
 February 2021

Vendor Name	Trans Date	Check No.	Trans Amount	Description
ADP	2/5/2021	n/a	\$ 182.90	ADP Workforce Now HR Fees - Jan 2021
ADP	2/5/2021	n/a	\$ 185.30	ADP Time & Attendance Fees - Jan 2021
ADP	2/5/2021	n/a	\$ 386.88	ADP PW02, PW04 Fees - Jan 2021
ADP	2/25/2021	n/a	\$ 209.60	ADP YE Reporting & W-2s
BlueFin	2/2/2021	n/a	\$ 8,433.65	Bluefin CC Processing Fees - Jan 2021
BlueFin	2/2/2021	n/a	\$ 92.34	Bluefin Civic PayPad Fees - Jan 2021
CalPERS	2/10/2021	n/a	\$ 11,464.92	CalPERS Retirement - PW06 Ended 2/8/2021
CalPERS	2/25/2021	n/a	\$ 11,549.42	CalPERS Retirement - PW08 Ended 2/22/2021
GSE Construction	2/23/2021	n/a	\$ 183,540.00	Orchard Run WTP Improvements - Construction Pymt #2
LAIF	2/11/2021	n/a	\$ 500,000.00	Transfer to LAIF
Wells Fargo CC	2/12/2021	n/a	\$ 2,272.34	WFB CC Payment - Feb 2021
			<b>\$ 718,317.35</b>	

Scotts Valley Water District  
 AP Check Register  
 February 2021

Vendor Name	Check Date	Check No.	Check Amount	Description
-------------	------------	-----------	--------------	-------------

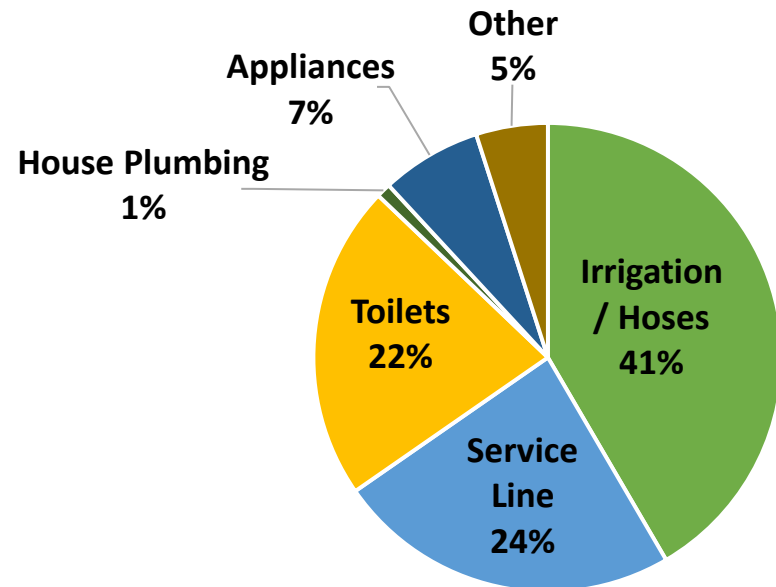
Legend:

Abbreviation:	Meaning:
PW	Potable Water
RW	Recycled Water
WW	Waste Water
WTP	Water Treatment Plant
EE	Employee
ER	Employer
CO	Change Order
TO	Task Order
SA	Service Application
FY	Fiscal Year
OPS	Operations
Eng	Engineering
Adm	Administration
Fin	Finance
WUE	Water Use Efficiency
ENR	Engineering News Record
ACWA	Association of California Water Agencies
LID	Low Impact Development
UB	Utility Billing
AMI	Advanced Metering Infrastructure
PS	Pump Station

## Leak Adjustment Program Report FY 2021

	RES Requests	CII Requests	Approved	Denied	Appeals	Reason Denied	Total Adjust Credit	Total Excess Use (gallons)
JUL	8	0	8	0	0		\$1,806	148,425
AUG	9	0	8	1	0	Consumption did not exceed PY	\$4,338	301,542
SEPT	9	0	7	2	0	< 5 yrs (1), prior billing period (1)	\$1,996	129,498
OCT	16	0	12	4	0	< 5 yrs (2), cons. < PY (2)	\$4,457	304,641
NOV	18	2	20	0	0		\$6,210	494,504
DEC	14	0	13	1	0	< 5 yrs (1)	\$3,307	278,601
JAN	8	0	8	0	0		\$2,644	181,979
FEB	14	2	14	2	0		\$3,802	270,930
MAR								
APR								
MAY								
JUN								
<b>Total</b>	<b>96</b>	<b>4</b>	<b>90</b>	<b>10</b>	<b>0</b>		<b>\$28,560</b>	<b>2,110,120</b>
FY 2020	92	9	87	11	2		\$35,523	2,480,408

### Sources of Leaks



**Montgomery & Associates (M&A)**  
**ACWA Groundwater Committee Meeting Report**  
**March 4, 2021**  
**1:00 pm**

**DWR UPDATE**

**Steven Springhorn, Acting Director**

DWR is focused on reviewing the GSPs for the 21 basins that have submitted plans. At the same time, they are trying not to forget about the other 73 basins that are currently writing their plans.

**Craig Altare**

Received 43 Groundwater Sustainability Plans (GSP) for 18 critically over-drafted basins. Also received plans for 3 non-overdrafted basins, and one GSP from a very low priority basin.

Craig reviews the options for GSP review:

- Approved – substantially complies with SGMA. Will include recommendations for improvement that should be taken seriously. If you're plan comes back with DWR recommendations – implement the recommendations expediently.
- Incomplete – includes deficiencies that preclude approval, but DWR believes these deficiencies can be addressed in 180 days. After 180 days the GSP is moved to either the approved on is inadequate classification.
- Inadequate – DWR and SWRCB will consult on whether a GSP is inadequate. If a GSP is inadequate, the goal is to get back to local control

DWR is “getting close to releasing a few” reviews of GSPs.

John Woodling suggests GSAs should plan on being in the Incomplete group. In this way, the GSA will be prepared if they need to do lots of work in that 180-day period. Craig Altare agrees. GSAs should have a contingency plan in place before the assessments are released. 180 days is not a long-time frame to fix these issues.

Final assessment will include:

- A cover letter
- A Statement of Findings (abbreviated results)
- A Staff report with the assessment

Craig reminds us that this is an ongoing process.

In response to a question, Craig Altare will look at regulations to see if whether submitting a GSP update before the 5-year limit, puts you on a new schedule for 5-year updates.

### **Steven Springhorn**

Steven highlights places where there is a GSP/land use nexus

- Notes that Counties are the presumed GSA for white areas. And counties have land use authority
- Reminds us of the legislation part that says the county general plan must take a GSP into account. Steven calls this a subtle connection. DWR wants to know how to advance conversations about this. One clear area is a stronger connection between GSAs and County well permitting. But where else should the connection be made?
- Most projects will require County support or permitting.

Basically, close coordination between the GSA and County is important.

Steven highlights the MyDryWaterSupply website to report dry wells. Maybe tell your GSA or stakeholders about this. DWR is trying to keep this site active.

<https://mydrywatersupply.water.ca.gov/report/>

### **Keith Wallace – Planning Assistance**

The recent GSP webinar was recorded and is online (within the next week).

DWR now has information about tips and tactics for online meetings. You can find this on DWR's assistance and engagement page. <https://water.ca.gov/Programs/Groundwater-Management/Assistance-and-Engagement>

### **Steven Springhorn**

AEM Program

- DWR is very close to starting the AEM program. It will start with a Webinar this spring. They are starting outreach to GSAs now. **There is a new AEM webpage ...**  
<https://water.ca.gov/Programs/Groundwater-Management/Data-and-Tools/AEM>.
- DWR will need local geologic data for the pre-flight planning. GSAs should start compiling the lithologic data if you want an early flight in your area.

SGMA data viewer

- InSAR data from Oct 2019 to Oct 2020 will be out (hopefully) this month
- 2018 land use data with multi-crop data might be out this month

**SARAH SUGAR/SWRCB (NATALIE IS ON MATERNITY LEAVE)**

Sarah presents a shorter version of the presentation she gave on 2/18.

State intervention is intended to get locals back in control, and it triggered by specific deadlines

What it means for a Basin to be on probation

1. Putting a basin on probation is a discretionary action by the State Board. It is not automatic.
2. The Board has broad authority to conduct investigations and charge fees for basins on probation
3. The Board can develop an interim GSP for basins on probation. This is a temporary plan. It will likely be just demand management. It will include:
  - a. Corrective Actions
  - b. Monitoring plan
  - c. Schedule
  - d. Enforcement

**Intervention/Probationary timing**

If no plan is turned in, there is an at least 90-day noticing for a probationary hearing. After the probationary determination, the GSA has 180 days to fix deficiencies. After the 180-days, the board starts on an interim plan.

Incomplete plan. Local agencies first have 180 days to remedy any plans. After this 180-day period, if the plan is not remedied there is a 90-day notice of a probationary hearing. If the basin is declared probationary, a basin has ONE YEAR to fix problems (however, the Basin is on probation and is being charged fees). Then after the year, the State can develop its interim plan

Inadequate plan. There is a 90-day notice of a probationary hearing. If the Basin is declared probationary, a basin has ONE YEAR to fix problems (however, the Basin is on probation and being charged fees). Then after the year, the State can develop its interim plan. Note that this is the same as the timeline for an incomplete plan, without the 180-day initial time frame to remedy plans.

**STATE LEG UPDATE/KRIS ANDERSON**

There is no expectation to change SGMA this year. Nothing has been proposed to change the SGMA language. There are two groundwater-related bills ACWA is following:

AB350. Creates a three-year program in State Department of Food and Agriculture to help reach pumping reduction goals through conservation as opposed to fallowing. ACWA has not taken a position on the bill. The funding source is unsure.

AB252. Sponsored by EDF. Provides grants to develop and repurpose land from Ag purposes to multi-benefit uses. Focused on habitat restoration, improving flood plains, converting to rangeland, etc. ACWA has a support if amended positions.

ACWA has heard about people reaching out to the governor regarding extending the SGMA GSP due dates beyond January 31 2022. There is no legislation so far. If this is an issue, reach out to Kris Anderson directly.

### **FEDERAL LEG UPDATE/DAVE REYNOLDS**

The congressional earmark ban may die soon for “public projects”. But not corporate projects. This could be huge for public projects.

### **GRA/ABBY MADRONE**

GRA is developing a 3-year strategic plan which includes:

- Continue to lead in groundwater
- Expand and engage members
- Build organization resilience
- Diversify revenue

2 Technical Committee members, include Bill DeBoer, are participating in the DWR **California Well Standards Bulletin 74 Update** on behalf of GRA; participating in several subcommittees to provide expert input

A sub-group of the GRA Technical Committee is preparing to review the DWR **California’s Groundwater Update 2020** report. If ACWA GW Committee would like to collaborate contact either Charlie Brush or Lisa Porta.

The Technical Committee is developing a new series of articles for the HydroVision Newsletter covering several technical and regulatory aspects related to PFAS contamination of groundwater.

GRA is working on “ask the expert” lunches or GRACasts.

Legislative Advocacy day is March 24

Annual GSA Summit (June 9-10)

Wester Groundwater Conference (Sept. 13-15) Does not appear to be in person

MAR Symposium (April 11-15, 2022) In Long Beach. In person

### **GROUNDWATER MANAGEMENT DISTRICT ASSOCIATION/STEVE WALTHOUR**

This Association was formed in 1974 to deal with the Ogallala Aquifer

It currently includes membership from about 45 Districts, covering 9 states. Desert Water Agency (Palm Springs) and SGA (Sacramento) are the California districts that are members.

They meet a couple times per year, and advocate with the NWRA, even though they are an independent group. [www.GMDAusa.org](http://www.GMDAusa.org) is the website. They are big on State Primacy and State rights.

Cost is only \$350/year. Affiliate membership is only \$125/year. If interested, contact Steve at [swalthour@northplainsgcd.org](mailto:swalthour@northplainsgcd.org)

### **FLOODMAR/JIM WIEKING**

FloodMar is an integrated strategy to use high flows in ag land and managed land to recharge groundwater. It is part of multi-faceted strategies for flood control, reservoir reoperation, etc.

Most work is in

1. Guidance. There is a FloodMAR community that needs a network to connect on Best Management Practices, etc. There will be another workshop on March 5, 2021. But we knew that. They are trying to get the network up and running in these workshops
2. Watershed studies. Working on the Merced River Watershed FloodMAR reconnaissance study. Want to prove concept at the watershed scale. Includes integrated watershed modeling. There is a phase of the project to look at vulnerability to climate change. Looking at 30 climate scenarios with variable temperature and precipitation. Also looking at adaptation strategies. Want this to be a template for studies in other watersheds.
3. Pilot projects. These are short term actions to ground truth FloodMar concepts. One ongoing project builds on TNC's BirdReturns program. They have created over 60,000 acres of temporary habitat in the Central Valley. And then TNC started asking questions about how much recharge was happening in these habitats. Hopefully provide guidance to GSAs on incorporating these lessons into projects.

M&A had to leave at this point. Missed Subcommittee updates





March 19, 2021

The Honorable Mike McGuire  
 Chair, Senate Committee on Governance and Finance  
 State Capitol, Room 5061  
 Sacramento, CA 95814

**RE: SB 323 (Caballero) – Local government: water and sewer service: legal actions**  
**Position: SUPPORT**

Dear Chair McGuire:

The Association of California Water Agencies (ACWA) and undersigned organizations write to express our strong support for SB 323, which would provide public agency water and sewer rates the same protections already afforded to fees and charges that fund other essential government services.

This bill would authorize a local agency or interested person to bring a validation action in a superior court to determine the validity of a fee or charge for water and sewer service. It would also require an interested party bring a validation action within 120 days after the fee or charge becomes effective.

Reliable long-term financial planning is paramount to providing essential government services, like water and sewer. Public water and sewer utility budgets are largely funded by revenue collected through service rates. These rates provide the funding necessary to improve aging infrastructure, build facilities needed to accommodate new growth, improve delivery systems, and operate effectively. While public water and sewer service providers require financial stability to meet these demands, existing law does not prevent lawsuits that seek refunds or seek to invalidate existing rate structures *years* after rates have been adopted and collected.

The California State Legislature has recognized the need to minimize fiscal uncertainty for public agencies providing essential government services by creating statutes of limitation for legal challenges to certain fees and charges, such as municipal electric rates<sup>1</sup> and connection and capacity fees assessed

<sup>1</sup> See Public Utilities Code § 10004.5.

by water and sewer agencies<sup>2</sup>. However, existing law offers a piecemeal statutory landscape where statutes of limitation are afforded to fees and charges that fund some essential government services but not others. SB 323 would close this gap in existing law by allowing customers to bring legal challenges to water and sewer rates within a reasonable—but limited—period of time. By following precedent established in existing law, this bill strikes a balance between the interests of ratepayers and the need for public agencies to maintain reliable sources of revenue.

The impacts of COVID-19 have exacerbated many challenges facing local agencies. The necessary disruptions to in-person work and Governor Newsom’s executive order prohibiting water shutoffs have made water districts’ revenue and financial planning more unpredictable. Now is the time to make existing legal protections consistent and increase predictability for utility providers throughout our State.

For the reasons above, we strongly support SB 323 and respectfully request your “AYE” vote when the bill is heard in the Senate Governance and Finance Committee. If you have any questions about our position or this bill, please contact ACWA Legislative Advocate Kristopher Anderson at [KrisA@acwa.com](mailto:KrisA@acwa.com) or (916) 441-4545.

Sincerely,



Kristopher M. Anderson, Esq.  
Legislative Advocate

KA:sn

cc: The Honorable Anna Caballero  
The Honorable Melissa Hurtado  
Honorable Members, Senate Committee on Governance and Finance  
Mr. Anton Favorini-Csorba, Consultant, Senate Committee on Governance and Finance  
Mr. Ryan Eisenberg, Policy Consultant, Senate Republican Caucus

Alameda County Water District	City of Garden Grove
Amador Water Agency	City of La Habra
Aromas Water District	City of Oceanside
Association of California Water Agencies	City of Roseville
Bella Vista Water District	City of Sacramento
Bodega Bay Public Utility District	City of Santa Rosa
Brooktrails Township Community Services District	City of Shasta Lake
California Municipal Utilities Association	City of Watsonville
California Special Districts Association	Cucamonga Valley Water District
Calleguas Municipal Water District	Diablo Water District
Coachella Valley Water District	Eastern Municipal Water District
Corcoran Irrigation District	El Dorado Irrigation District
City of Fountain Valley	El Toro Water District

---

<sup>2</sup> See Government Code § 66022.

Elk Grove Water District  
Elsinore Valley Municipal Water District  
Foothill Municipal Water District  
Helix Water District  
Hidden Valley Lake Community Services District  
Humboldt Bay Municipal Water District  
Humboldt Community Services District  
Indian Wells Valley Water District  
Irvine Ranch Water District  
Kings River Conservation District  
Las Virgenes Municipal Water District  
League of California Cities  
Los Angeles County Sanitation Districts  
Marin Water  
Mariana Ranchos County Water District  
McKinleyville Community Services District  
Mid-Peninsula Water District  
Modesto Irrigation District  
Monte Vista Water District  
North Coast County Water District  
North Marin Water District  
Olivenhain Municipal Water District  
Otay Water District  
Pine Grove Community Service District  
Princeton Codora Glenn Irrigation District  
Provident Irrigation District  
Public Water Agencies Group  
Rainbow Municipal Water District  
Rancho California Water District  
Reclamation District #1500  
Regional Water Authority  
Root Creek Water District  
Sacramento Suburban Water District  
San Bernardino Municipal Water Department  
San Diego County Water Authority  
San Francisco Public Utilities Commission  
San Juan Water District  
Santa Margarita Water District  
Scotts Valley Water District  
Sonoma County Water Agency  
South San Joaquin Irrigation District  
South Tahoe Public Utility District  
Southern California Water Coalition  
Tuolumne Utilities District  
United Water Conservation District  
Valley Center Municipal Water District  
Vista Irrigation District  
Walnut Valley Water District  
West County Wastewater District  
Western Municipal Water District  
Westlands Water District

# Is Water District Merger a Good Move?

Have Your Say: Next Meetings — SLVWD: Thursday, March 4 • SVWD: Thursday, March 11

The boards of the San Lorenzo Valley Water District and Scotts Valley Water District have been exploring the possibility of consolidating operations.

Each water district has a manager who is nearing retirement age, Rick Rogers in San Lorenzo Valley and Piret Harmon in Scotts Valley.

And although each agency has a mission to deliver water to customers, tapping into the Santa Margarita groundwater basin, have worked together on projects such as the intertie to allow them to share water in an emergency, the question is whether residents in the independent mountain towns of San Lorenzo Valley want to unite with the more urban city of Scotts Valley.

All the public discussions are taking place online via Zoom due to the COVID-19 restrictions on gathering.

Staff from both water districts agree there is the potential of substantial benefits by joining the two agencies.

"This is a collaborative effort to consider what is best for our customers, our water supply and our environment now and into the future," San Lorenzo Valley Water District Manager Rick Rogers said. "It's a good time to consider our options and have a conversation with the community."

"We think we have complimentary strengths that are worth a public review for potential to benefit customers and employees of both districts," Scotts Valley Water District Manager Piret Harmon said. "Specific benefits of merged oper-



ation could mean economies of scale, improved levels of customer service and more opportunities for employees."

It remains to be seen whether community members will agree.

Joe Serrano, executive officer of the Santa Cruz Local Agency Formation Commission, which governs consolidations, explained that process to San Lorenzo Valley board Feb. 4, a meeting viewed by nearly 100 customers, and Scotts Valley board Feb. 11.

"LAFCOs were created to support how municipal services, such as water, are delivered. It is encouraging to see that the two water districts continue to collectively search for ways to ensure that their constituents have adequate water supply through a strong level of service," Serrano said. "Consolidation is simply another tool that districts can utilize to improve how water is delivered."

A consolidation would bring together 7,900 connections San Lorenzo Valley and 4,000 connections in Scotts Valley into one system.

The San Lorenzo Valley Water District board will discuss the consolidation issue again at 6:30 p.m. Thursday, March 4. For information, see <https://www.slvwd.com/>

Bob Fultz, one of the five board members in San Lorenzo Valley, is asking that customers consider themselves owners of the water district and consider what it means to be a no-growth area bordered by cities like Scotts Valley and Santa Cruz that appear to be growing rapidly and facing their own fiscal challenges.

The next meeting for the Scotts Valley Water District board will be 6 p.m. Thursday March 11. For information, see <https://www.svwd.org/board-meetings>

The process of consolidation, facilitated by LAFCO, begins with an exploratory phase of at least one year that includes an analysis of both districts



Rick Rogers



Piret Harmon

and input from a stakeholder group that includes representatives from both districts.

If the feasibility study is favorable to consolidation, the districts can apply for a change of governance with LAFCO.

There would be multiple opportunities for public engagement and feedback, followed by a specified period during which customers would have an opportunity to support or oppose the proposal.

Following public review, the two boards could approve consolidation only if it is not opposed by a majority of ratepayers.



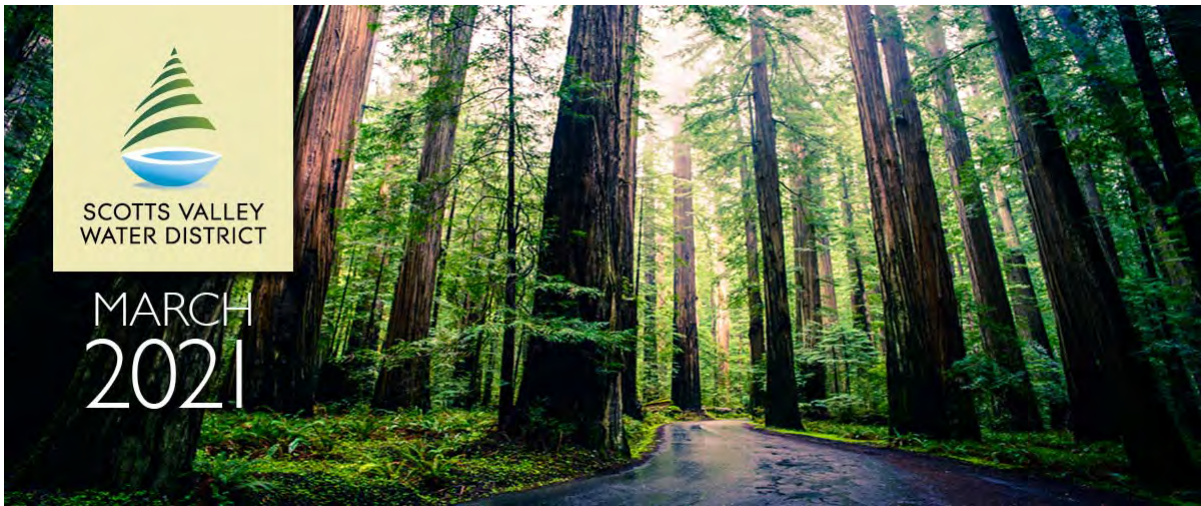
**BIG O TIRES**  
THE TEAM YOU TRUST

**BIG O TIRES IS OPEN**  
and here to serve the community.

Locally Owned and Operated!  
serving the community for over 20 years.

**BEST PRICES ON MICHELIN AND BF GOODRICH TIRES**

ASK FOR A QUOTE TODAY!



## Rainfall is down — Turf's up!

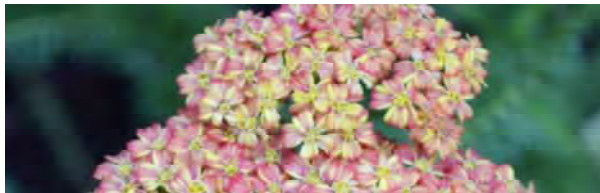
It's looking like another dry year. Despite a rainy week, as of mid-March, the rainfall total is about 15 inches. That's about a third of the average for this time of year. Last year, the Scotts Valley area only received 50% of its average rainfall.

### How can you help?

- Make sure your [irrigation system is working efficiently](#) and your [water pressure is regulated](#). The District offers an irrigation checklist to help.
- Use [WaterSmart](#) to see how much of your water goes to irrigation, and even compare it to last year.
- Get a smart irrigation controller that automatically adjusts for the weather — set it and forget it!

The image shows a promotional graphic for WaterSmart. At the top, the text reads "HOW CAN YOU MONITOR WATER USE AT YOUR HOME OR BUSINESS?". Below this, a laptop and a smartphone are shown displaying the WaterSmart web interface. The interface includes sections for "My Daily Use" (showing 531), "My Water Goals" (Top 20%), and "My Budget" (Hot Budget). At the bottom of the graphic, the text says "Use WaterSmart - It's Free!".

Visit the District website to learn more about landscape rebates — including the [Turf's Up special double rebate for lawn replacement](#) — and [WaterSmart](#).



## Plant of the Month: Yarrow

Looking for a butterfly-friendly, drought-resistant plant to add to your garden? Add yarrow (*Achillea millefolium*), but make some room because this variety self-spreads, allowing for maximum ground coverage.

Photo credit: [@photo\\_graphil](#)

# TURF'S UP!

**DOUBLE YOUR REBATE** for replacing your lawn with a drought-tolerant, low-water option.

Apply by April 15 to be eligible.

~~\$1~~ \$2

**PER SQUARE FOOT  
OF LAWN REPLACED**

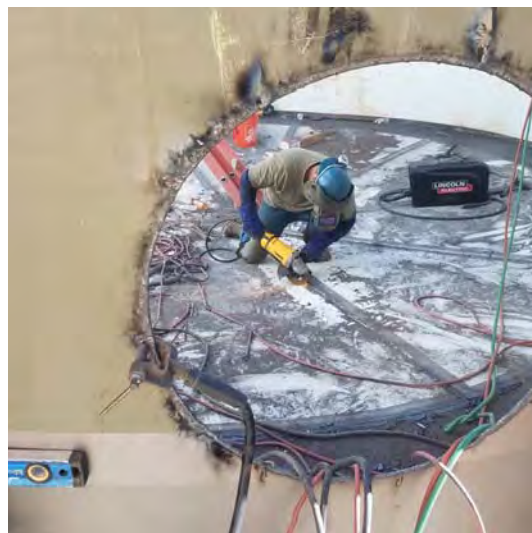
For details, visit [www.svwd.org/rebates](http://www.svwd.org/rebates)



# Progress continues on Orchard Run Treatment Plant improvements

The updates to the Orchard Run Treatment Plant are on track: by early March, the existing tanks had been demolished and were being replaced with a new 40,000-gallon capacity welded steel water storage tank.

Construction started in late 2020 to update infrastructure at Orchard Run Water Treatment Plant. The \$4 million project also will improve water quality, specifically the taste and smell of drinking water.



## SMGWA News: Board seeks new well owner representative

[Santa Margarita Groundwater Agency's](#) February board meeting was held Thursday, Feb. 25, and was conducted via all-remote, web- and phone-based access due to the coronavirus prevention guidelines. At the meeting, Director Jeff Koopman, who represents private well owners, was advanced from an alternate to a voting member of the board. [An ad-hoc committee was formed to select the well owner representative to fill the seat of a vacant alternate position.](#)

Continuing its work to develop the state-mandated Groundwater Sustainability Plan (GSP) that is due in early 2022, the board reviewed the narrative of focus areas for addressing groundwater sustainability, which has been called the “basin problem statement” in the past. The problem statement has evolved into an updated summary document, driven by comments and suggestions made by board members at earlier public meetings. The document emphasizes groundwater problem conditions that will be addressed in the GSP with projects and management actions.

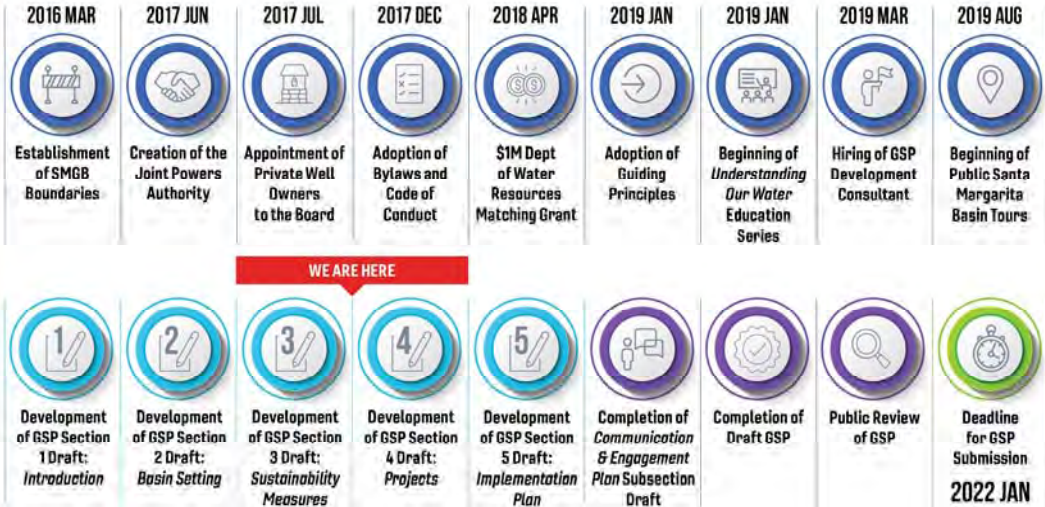
For the second meeting in a row, the board reviewed results of groundwater modeling scenarios for possible solutions that would help the basin achieve sustainability. Consultants provided a new projection scenario during the February meeting after the modeling projections shared in January resulted in an undesirable future outcome for the basin. The board had requested a less extreme climate forecast be presented, and the new scenario represents a greater variability in both temperature and precipitation than the first scenario considered by the board.

In developing the GSP, SMGWA must identify projects and management actions that will achieve long-term sustainability for the basin. Director Koopman presented a conceptual project idea and the board directed the staff to include this on the list of potential projects and management actions in the GSP. The agency also can rely on programs and projects that will be undertaken by member agencies, rather than executing these efforts directly.

The agency is seeking interested individuals to serve as an alternate (non-voting) Well Owner Representative. A position description and application are now available on the SMGWA website. [Applications are due by 5 p.m. on March 19.](#)

The next SMGWA Board of Directors meeting will be held Thursday, March 25, at 5:30 p.m. [More information.](#)

# The Path to a Groundwater Sustainability Plan (GSP)



SANTA MARGARITA  
Groundwater Agency

Groundwater sustainability  
is all our responsibility  
smgwa.org



Share

Tweet

Forward



Facebook



Website



Instagram

Copyright © 2021 Scotts Valley Water District, All rights reserved.  
You are receiving this email because you opted in at our website to "Stay Connected With Us".

**Our mailing address is:**  
Scotts Valley Water District  
2 Civic Center Dr.  
Scotts Valley, Ca 95066

[Add us to your address book](#)