ANNUAL REPORT
WATER YEAR 2019

Scotts Valley Water District
Board of Directors Meeting
March 12, 2020
Staggered annual reports
- Even numbered years are more extensive (Groundwater Reporting Area)
- Odd numbered years are limited data reports (SVWD area only)

Presentation outline
- Aquifer Conditions
- Groundwater management activities
SCOTTS VALLEY
HISTORICAL PRECIPITATION

2016 – 2019 = 42% of the cumulative 55-inch rainfall deficit that occurred over the drought.
DISTRICT GROUNDWATER PUMPING

<table>
<thead>
<tr>
<th>SVWD Well</th>
<th>Historical</th>
<th>WY2018</th>
<th>WY2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>#3B</td>
<td>409</td>
<td>337</td>
<td>7</td>
</tr>
<tr>
<td>Orchard</td>
<td>991</td>
<td>200</td>
<td>843</td>
</tr>
<tr>
<td>#9</td>
<td>426</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>#10A</td>
<td>544</td>
<td>371</td>
<td>234</td>
</tr>
<tr>
<td>#11A</td>
<td>152</td>
<td>39</td>
<td>28</td>
</tr>
<tr>
<td>#11B</td>
<td>683</td>
<td>260</td>
<td>101</td>
</tr>
<tr>
<td>Total</td>
<td>2,077 (2003)</td>
<td>1,211</td>
<td>1,215</td>
</tr>
</tbody>
</table>

Water Production 1,146 1,110
District Groundwater Pumping

District Pumping by Aquifer

- Decreased Lompico Aquifer pumping => increased groundwater levels

Annual Groundwater Pumping, acre-feet

- WY2010 to WY2019

Monterey, Lompico, Butano

MONTGOMERY ASSOCIATES
• Levels fluctuate due to both climate & pumping
• SVWD & SLVWD not pumping in Santa Margarita in the Scotts Valley area
MONTEREY FORMATION CONDITIONS

SVWD not pumping in the Monterey Formation
LOMPICO AQUIFER CONDITIONS

Increasing trend since 2017
Recharge from overlying Santa Margarita still occurring
BUTANO AQUIFER CONDITIONS
## SVWD GROUNDWATER QUALITY

### SVWD Well Quality Summary

<table>
<thead>
<tr>
<th>SVWD Well</th>
<th>VOCs</th>
<th>MTBE</th>
<th>Arsenic</th>
<th>Chromium-6</th>
<th>Iron &amp; Manganese</th>
<th>Sulfate</th>
<th>TDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>#3B Orchard Well</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>Above SMCL</td>
<td>Below SMCL</td>
<td>Above SMCL</td>
</tr>
<tr>
<td>#9 Orchard Well</td>
<td>Below MCL</td>
<td>Below MCL</td>
<td>ND</td>
<td>ND</td>
<td>Below SMCL</td>
<td>Above SMCL</td>
<td>Above SMCL</td>
</tr>
<tr>
<td>#10A Orchard Well</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>Above SMCL</td>
<td>Below SMCL</td>
<td>Below SMCL</td>
</tr>
<tr>
<td>#11A Orchard Well</td>
<td>Below MCL</td>
<td>ND</td>
<td>Below MCL</td>
<td>ND</td>
<td>Above SMCL</td>
<td>Below SMCL</td>
<td>Above SMCL</td>
</tr>
<tr>
<td>#11B Orchard Well</td>
<td>ND</td>
<td>ND</td>
<td>At MCL</td>
<td>ND</td>
<td>Above SMCL</td>
<td>Below SMCL</td>
<td>Below SMCL</td>
</tr>
</tbody>
</table>

**Definitions:**
- ND = non-detect
- MCL = maximum contaminant level
- SMCL = secondary MCL

**Additional Information:**
- All water is treated to drinking water standards.
No groundwater remediation since 2016. Draft Focused Feasibility Study proposing potential remediation alternatives including soil excavation was submitted to USEPA in January 2019.

No groundwater remediation since Aug 2015. Vapor extraction continues.

Needs a work plan to further investigation to characterize the chemical concentrations in soil, soil gas, and indoor air with conclusions and recommendations regarding the conditions, potential risks to human health and the environment, and remedial actions needed.
GROUNDWATER MANAGEMENT

- Groundwater Augmentation
  - Water Use Efficiency program
  - Recycled Water Program
  - Regional Intertie Project
  - Regional Water Supply MOA
  - Santa Margarita Groundwater Basin ASR Project
  - Low Impact Development projects
  - Purified Recycled Water Recharge Project

- Groundwater Management Activities
  - Sustainable Groundwater Management
  - Santa Margarita Basin Groundwater Model
SVWD actively participates in the Santa Margarita Groundwater Agency (SMGWA) formed per the Sustainable Groundwater Management Act (SGMA) of 2014.

Work to complete a Groundwater Sustainability Plan (GSP) for the Santa Margarita Basin by January 31, 2022 is underway.

Part of the work to prepare a GSP is to update and improve the groundwater model.
RECOMMENDATIONS

1. Review and verification of the District’s pressure transducer data collection program, including TW-19 which had had inconsistent groundwater levels measurements.

2. A monitoring well completed only in the Butano aquifer should be constructed near the Butano production wells to monitor groundwater levels in that aquifer (Prop 68 grant funding may be used for this).
2019 SUCCESSES

- Lompico Aquifer groundwater levels are increasing in the Scotts Valley area

- The newest District well, the Orchard Well, pumped has been the District’s largest pumping well (843 acre-feet in WY2019)

- GSP development is underway, including update and improvements to the Santa Margarita Basin groundwater model
QUESTIONS?