



SANTA MARGARITA Groundwater Agency

WATER EDUCATION SERIES

WORKSHOP 3

**MANAGING GROUNDWATER: HOW CAN WE PREPARE FOR AN
UNCERTAIN FUTURE?**

Workshop 3

Managing Groundwater: How Can We Prepare for an Uncertain Future?

AGENDA

- 9:15 CONVENE
- 9:20 WELCOME AND INTRODUCTIONS
- 9:30 KEYNOTE ADDRESS
- 9:50 SESSION 1 – WATER MANAGEMENT FACT-CHECK: INFORMATION ON EXPRESSED CONCERNS
- 10:30 SESSION 2 – CLIMATE CHANGE AND THE SANTA MARGARITA GROUNDWATER BASIN
- 11:00 BREAK
- 11:10 BREAKOUT SESSION – WATER MANAGEMENT SCENARIO PLANNING – GROUP EXERCISE
- 12:00 SESSION 3 – INTEGRATED WATER MANAGEMENT: THE PAST, CURRENT AND POTENTIAL FUTURE
- 12:50 FINAL PANEL - QUESTION AND ANSWER SESSION
- 1:25 CLOSING
- 1:30 ADJOURN

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Managing Groundwater: How Can We Prepare for an Uncertain Future?

QUESTION 1

Several comments were received at Workshops 1 and 2 that refer to “our water”.

What does “our water” mean to you?



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Managing Groundwater: How Can We Prepare for an Uncertain Future?

SESSION 1

Water Management Fact-check

- Series Of Statements
 - Prepared Using Frequent Comments From Workshops 1 And 2
 - Perspectives Provided By SMGWA Staff
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SESSION 1

Water Management Fact-check

STATEMENT 1

“An above-ground reservoir is cheaper and easier to construct than a below-ground one. Therefore, we should either raise the level of Loch Lomond or develop new reservoirs at one or more of the old quarry sites.”



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SESSION 1

Water Management Fact-check

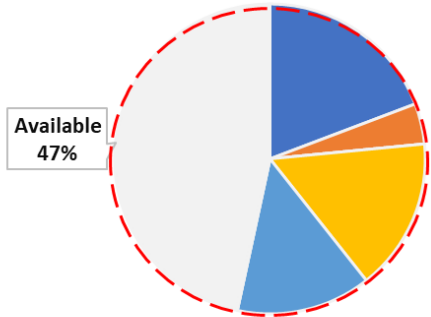
STATEMENT 2

“There is too much growth for our available and future water supply. We will damage the basin if we keep growing so it is time that we stop or constrain development.”

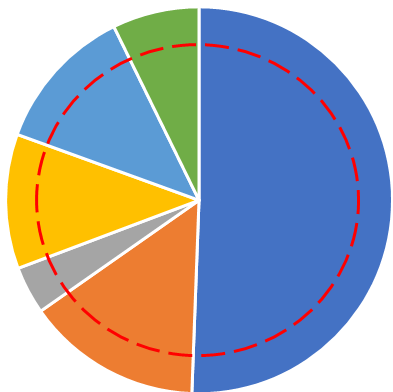


DEMAND - SUPPLY EQUATION

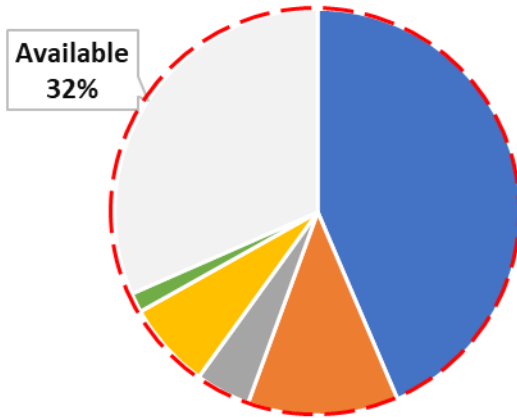
1975



1995



2015



Annual Safe Yield
(Average Year)

Annual Water Use

SVWD 370

MGY

EFFICIENT HOME 45,000 GY (0.01%)

100 HOMES 4.5 MGY (1.2%)

HOTEL 1.5 MGY - 3 MGY (0.4% - 0.8%)



Annual pumping in Scotts Valley subarea of SMGB

1975: 1388 AFY (452 MGY)

1995: 3030 AFY (987 MGY)

2015: 1779 AFY (580 MGY)

AFY – Acre Feet per Year

1 AF = 325,853 Gallons

MGY – Million Gallons per Year

GY – Gallons per Year



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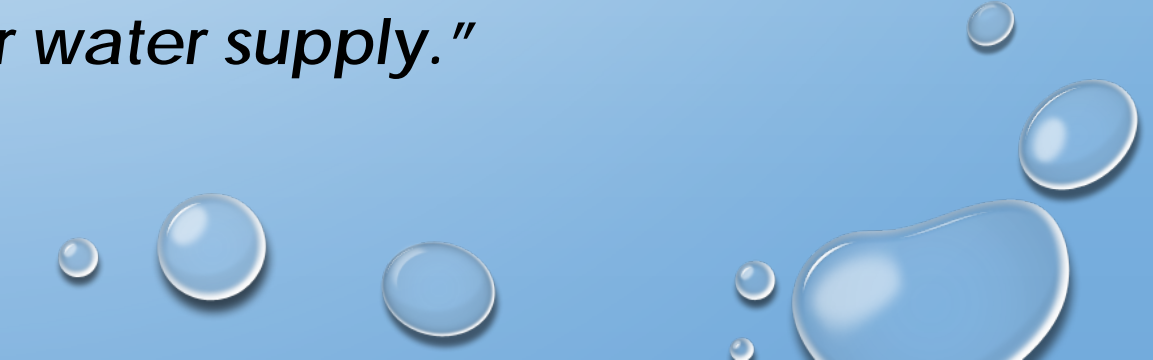
Managing Groundwater: How Can We Prepare for an Uncertain Future?

SESSION 1

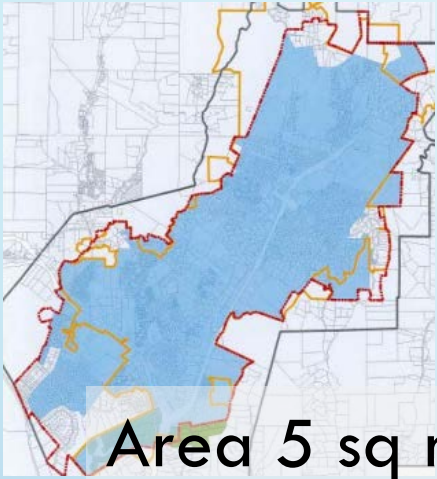
Water Management Fact-check

STATEMENT 3

“We should be able to recharge our aquifers by capturing rainfall during wet years. We should capture stormwater since it is the most affordable and practical solution for our water supply.”



STORMWATER CAPTURE



Area 5 sq miles

Rainfall 4 inches =
350 million gallons
water

Reservoir:

Football field
footprint that is
1,000 ft high

- SCOTTS VALLEY HAS 3 LARGE SYSTEMS TO COLLECT, TREAT AND PERCOLATE INTO GROUND RAINWATER
- TRANSIT CENTER LID COMPLETED 2017
 - \$1.2M CAPEX
 - INFILTRATION RATE 1.3 MGY IN AVERAGE RAINFALL YEAR
- COMBINED INFILTRATION 7.3MG IN WY2018

Comparative Cost

| | |
|--------------------|---------------------|
| Existing Supply | ~\$1,000/acre foot |
| RW Recharge | ~\$3,000/acre foot |
| Stormwater Capture | ~\$30,000/acre foot |



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SESSION 1

Water Management Fact-check

STATEMENT 4

“The water in the San Lorenzo Valley belongs to the San Lorenzo Valley and should not be used by others. All water users in the Santa Margarita Basin should rely on water originating from their own jurisdiction, and we shouldn’t be sharing or giving our water away to other agencies.”







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SESSION 1

Water Management Fact-check

STATEMENT 5

“SMGWA is going to make water rights policies and that doesn’t seem fair.”





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SESSION 1

Water Management Fact-check

STATEMENT 6

“SMGWA should meter private wells and control the water use because private well owners get water for free and use too much of it.”



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BREAKOUT SESSION

- THE YEAR IS 2029.
- THE BASIN IS IN THE 7TH YEAR OF A DROUGHT.
- WORK TOGETHER AND DESCRIBE THE TOP 5 ACTIONS THAT THE GROUNDWATER AGENCY NEEDS TO HAVE IMPLEMENTED STARTING IN 2022 (YEAR ONE OF THE SGMA GSP) TO ENSURE THAT YOU HAVE AVAILABLE WATER