



**SCV**  
**WATER**

# **Water Conservation Garden & Education Experience**

## **Design Completion Check-In**

Water Resources and Watershed Committee  
February 8, 2022

# Design Review Objectives

- Overview of Water Conservation Garden and Education Experience Project
- Review Completed Exhibit Design Concepts
- Demonstrate 3-D Garden Model
- Inform on Engineering Cost Estimates
- Elicit Feedback from WRW Committee

# Milestones

1. Project Overview
2. Evolution of Garden Design Concept
3. Completed Water Conservatory Garden & Education Experience Site Design
4. Completed Exhibit Designs
5. 3-D Model Demonstration
6. Engineering Cost Estimates
7. Discussion

The background features a white central area framed by curved, overlapping bands of dark blue and light green. The top and bottom edges are defined by these bands, which curve inward towards the center. The text is centered within this white space.

# Project Overview

# Project Overview

## SCV Water Strategic Plan Objectives (2019)

Goal A. Customer/Community - implement policies supporting the social, quality of life, and environmental values of the community

- A.2 - Proactively communicate with and engage our community on water matters of importance in the region positioning SCV Water as a leading resource and reliable authority on water issues.
  - A.2.6 Raise awareness of and demand for conservation programs (e.g. water conservation campaign(s) and related media buys, public and school educational programs, participation at public events, SCV Water web site, e-newsletter and social media, self-guided landscape tour, conservatory garden, etc.)

# Introductions



MATTHEW S. DICKENS, MPA  
SCV WATER



JULIA GROTHE  
SCV WATER



SAL CONTRERAS, P.E.  
ENCOMPASS CONSULTANT  
GROUP



CHRIS HORTON, MLA  
PACIFIC COAST LANDSCAPING  
DESIGN

- Additional Support:**  
SCV Water - Water  
Resources Committee  
& Board of Directors  
SCV Water Staff
- Education
  - Communications
  - Sustainability
  - Engineering
  - Water Resources
  - Administration

- Exhibit Design
- Bowman Change

# Project Overview

***Mission** - Educating the public on the value of water.*

***Vision** - Creating sustainable public spaces for educational, inspirational, and demonstration purposes pertaining to the values and beneficial uses of water throughout the Santa Clarita Valley.*

1. Legacy Conservatory Garden Taskforce
2. SCV Water - Conservatory Garden Technical Advisory Group
3. SWP and Local Aquifer Exhibit Designs
4. Conservation Garden & Education Experience Design Team





# Benefits to the Agency & Community

## 1. Supports Best in Class Education Programs

- a. Child Education Programs
- b. Adult Education Programs
- c. General Public Use & Demonstration
- d. Community Events
- e. Training and Industry Events

## 2. Provides State of the Art Learning Garden

- a. Mixture of Curriculum-Salient & Water Efficient Plants
- b. Use of High Efficiency Irrigation Technologies
- c. Meets and Exceeds Model Water Efficient Landscape Ordinance
- d. Education Exhibits (Global, State, and Local Water Perspectives)

## 3. Enhances Education, Training, & Event Spaces

- a. Garden Pavilion
- b. Sustainability Shack
- c. Shade Sails
- d. Amphitheatre

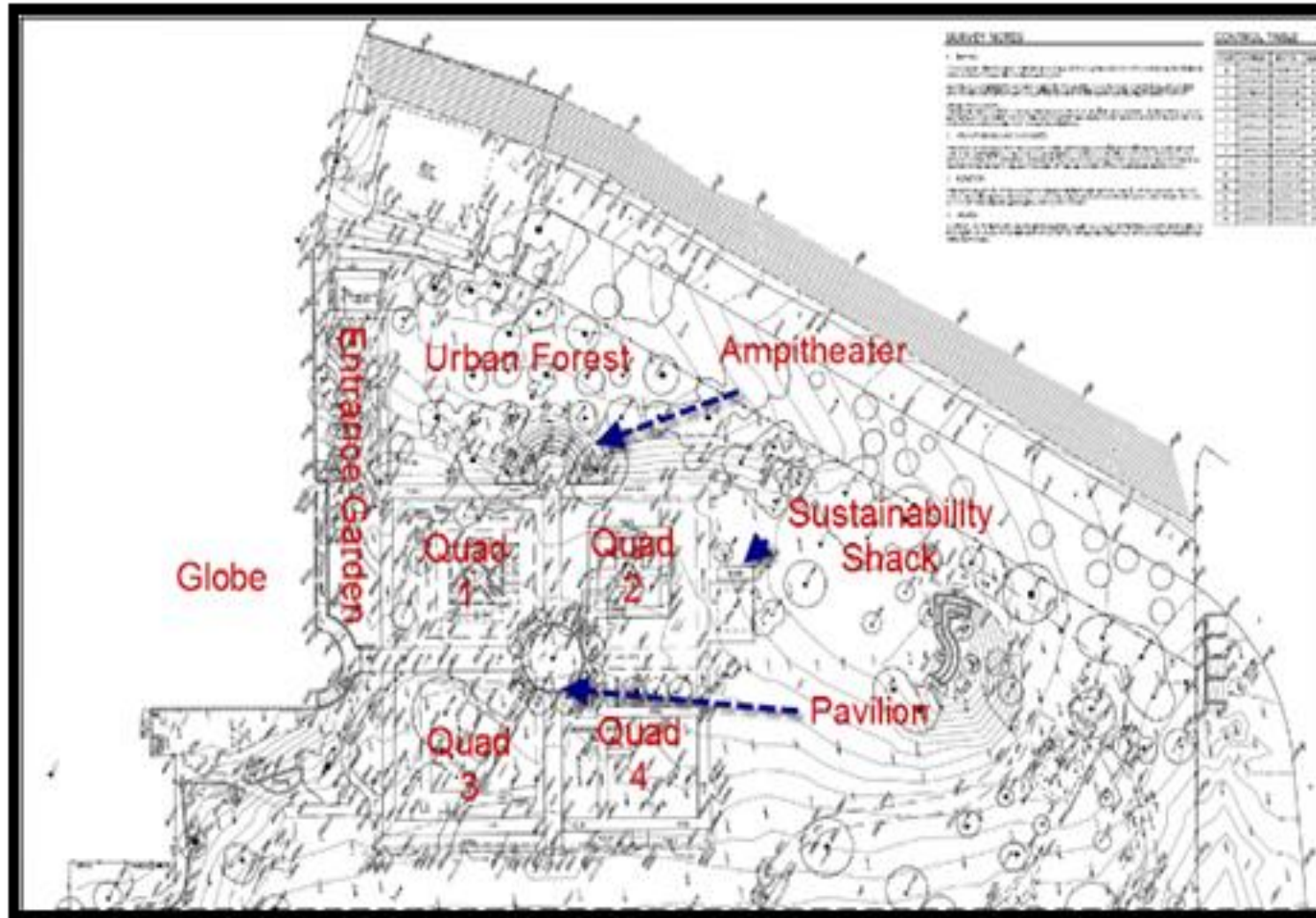




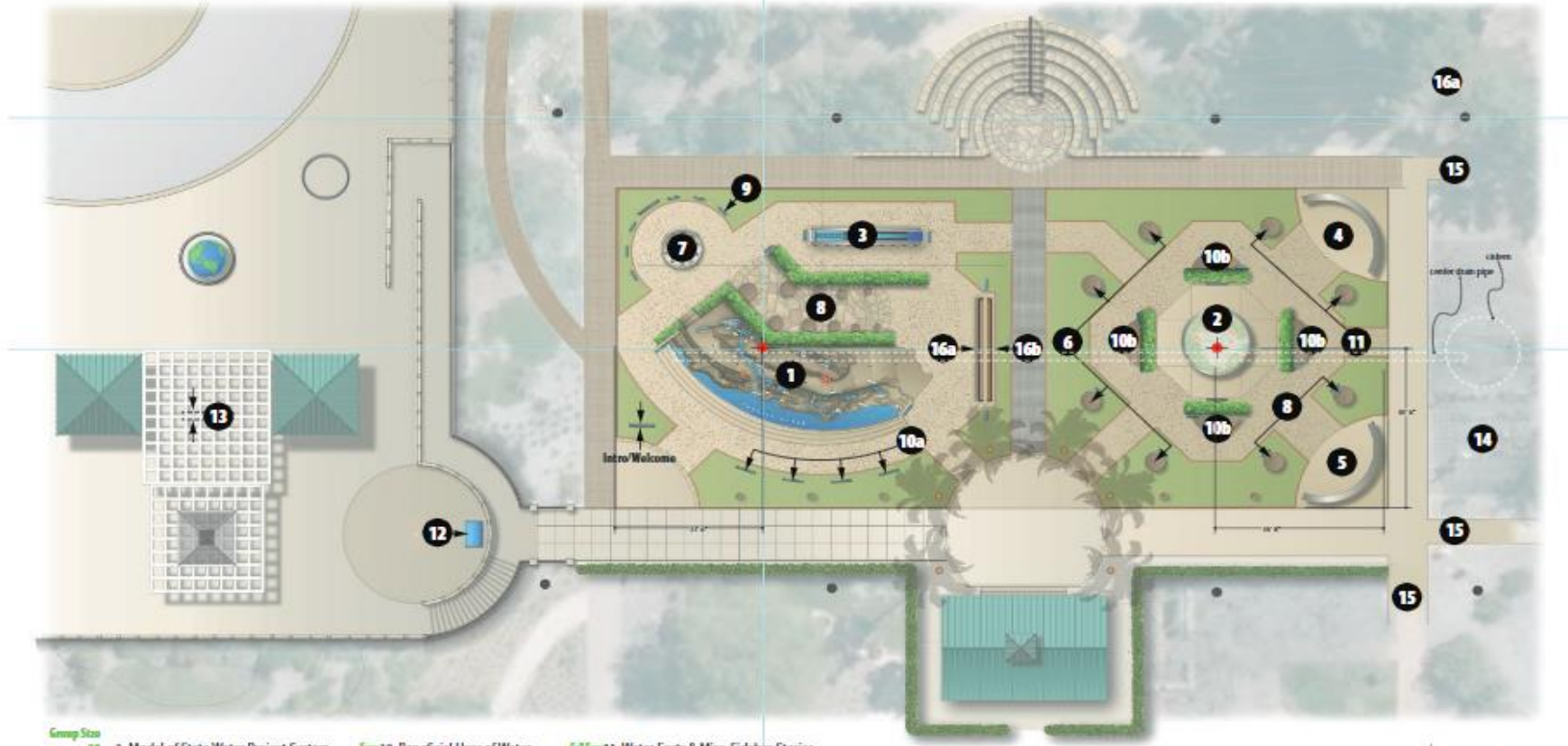


# **Evolution of Garden Design Concept**

# Project Overview



# Exhibit Master Plan



**Group Size**

- 30- 1. Model of State Water Project System
- 30- 2. Local Watershed
- 15- 3. Water Energy Nexus Pump Model
- 15- 4. Outdoor Water Conservation
- 15- 5. Indoor Water Conservation
- 15- 6. Soil Horizons/Soil Profiles
- 5- 7. Water Quality
- 15- 8. Water Footprint
- 15- 9. How Will Climate Change Impact Water Supply?

- 5- 10. Beneficial Uses of Water
  - a. as state/public issue
    - value of water
    - water waste
    - energy waste
    - beneficial uses
  - b. as personal issue
    - value of water
    - water waste
    - energy waste
    - beneficial uses

- 5-15- 11. Water Facts & Misc. Sidebar Stories
  - collection of individual users
  - what you can do to conserve water
  - SCV Water history
  - LRP transformations
  - where does water go?
- 30-12. Conservatory Garden Map
- 30-13. Water Treatment Plant Overview

- 30- 14. Composting, Recycling, FOGs
- 30- 15. Path & Urban Forest Sample Leading Back To Classroom (TBD next phase)
- 30- 16. Aquifers
  - a. state
  - b.local

Rough slab-out for water & power (location shown)

Topic Areas Site Plan—Concept  
Interactive State Water Project Model  
Scale: 1" = 10'

bowman.change

Partners/Consultants:



Project:

Start Date: 5/1/2020  
Integrative Exhibit Design Development  
For Santa Clara Valley Water Exhibits

Client:



Revisions:

1) 6/29/2020	4)	4)
2)	3)	2)
3)	4)	4)

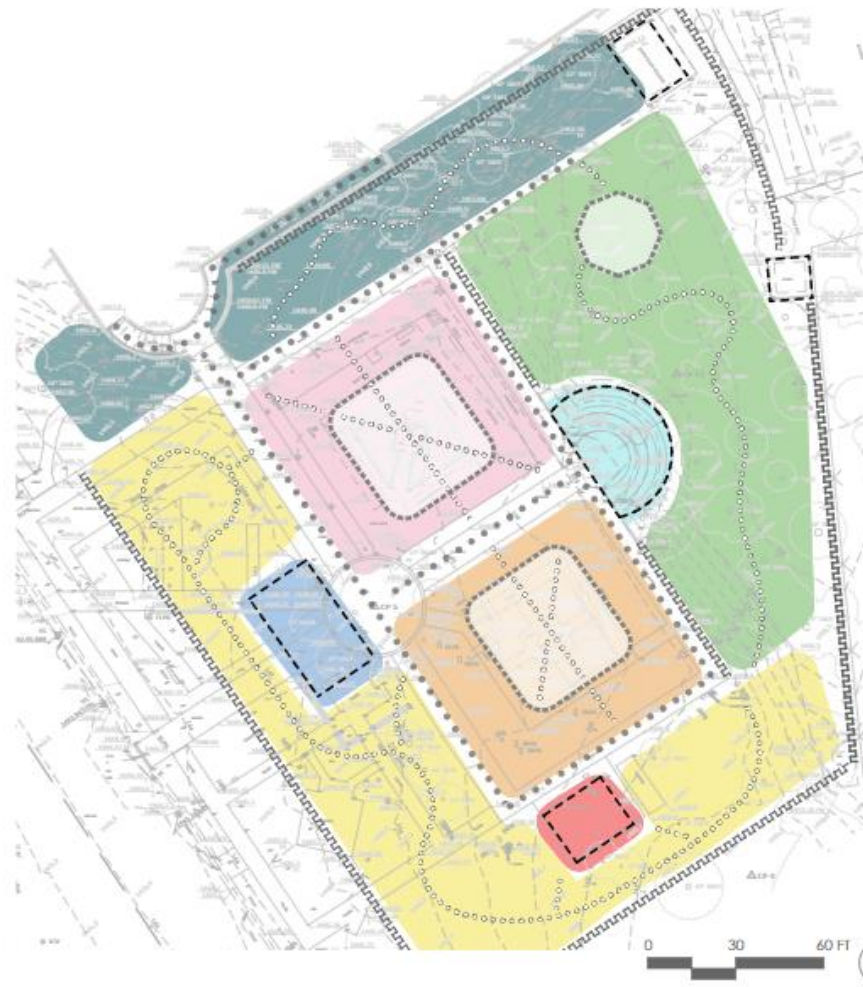
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# Project Overview



## KEY LEGEND

	<b>PRUNING GARDEN</b>	Plant ID Scavenger hunt Community pruning education Low water use planting Natives and adapted planting
	<b>ENTRY GARDEN</b>	Plant ID Scavenger hunt Stormwater collection Raingardens ADA/CBC compliant access
	<b>URBAN FOREST</b>	Trees appropriate for home use Low water use planting Plant ID Scavenger hunt ADA/CBC compliant access
	<b>EXHIBIT SPACE A</b>	Plant ID Scavenger hunt Shade structures covering exhibits State of CA Water Engineering Exhibit ADA/CBC compliant access
	<b>EXHIBIT SPACE B</b>	Plant ID Scavenger hunt Shade structures covering exhibits Flexible event space Future exhibits focusing on home use TBD ADA/CBC compliant access
	<b>SUSTAINABILITY SHACK</b>	Wood or metal structure Unique, ecological form? ADA/CBC compliant access
	<b>PAVILION</b>	Classic California aesthetic Solid roof structure Flexible event space ADA/CBC compliant access
	<b>AMPHITHEATER</b>	Existing stone seating to remain Existing walking surfaces to be replaced with stone or concrete Shade structures? ADA/CBC compliant access
	<b>PRIMARY PATH OF TRAVEL</b>	8' 12" width Permeable pavement where feasible Unit pavers and concrete
	<b>SECONDARY PATH OF TRAVEL</b>	4' 8" width Permeable pavement where feasible Unit pavers and concrete
	<b>VEGETATED BORDER</b>	
	<b>BUILDING</b>	



CONCEPTUAL DESIGN

SCVWA CONSERVATORY GARDEN REFURBISHMENT


27254 BOJOURNIT CARPENTER RD.  
SANTA CLARA, CA 95050

08.03.2020



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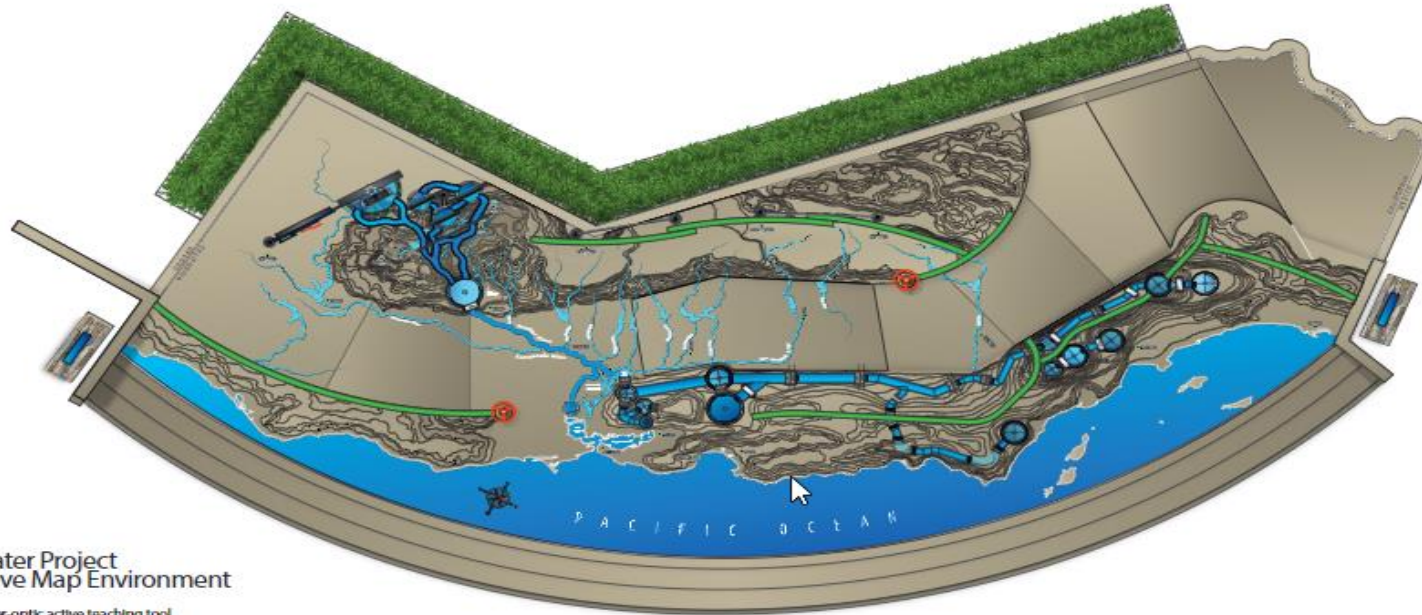
**Water Conservatory  
Garden & Education  
Experience Design**



# Project Overview



# State Water Project - Exhibit Design



## State Water Project Interactive Map Environment

Water and fiber-optic active teaching tool

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Partners/Consultants:

 dhackley.com

Project:

Start Date: 5/1/2020  
Independent Exhibit Design Development  
For Santa Clara Valley Water Exhibit

Client:

 SCV  
WATER

Revisions:

Rev	Date	By	App
1	6/26/2020	bc	bc
2	7/15/2020	bc	bc
3		bc	bc

Final Design Documents Only. Not for construction or marketing purposes. These are the preliminary drawings. Please consult with the architect for more information. All rights reserved.

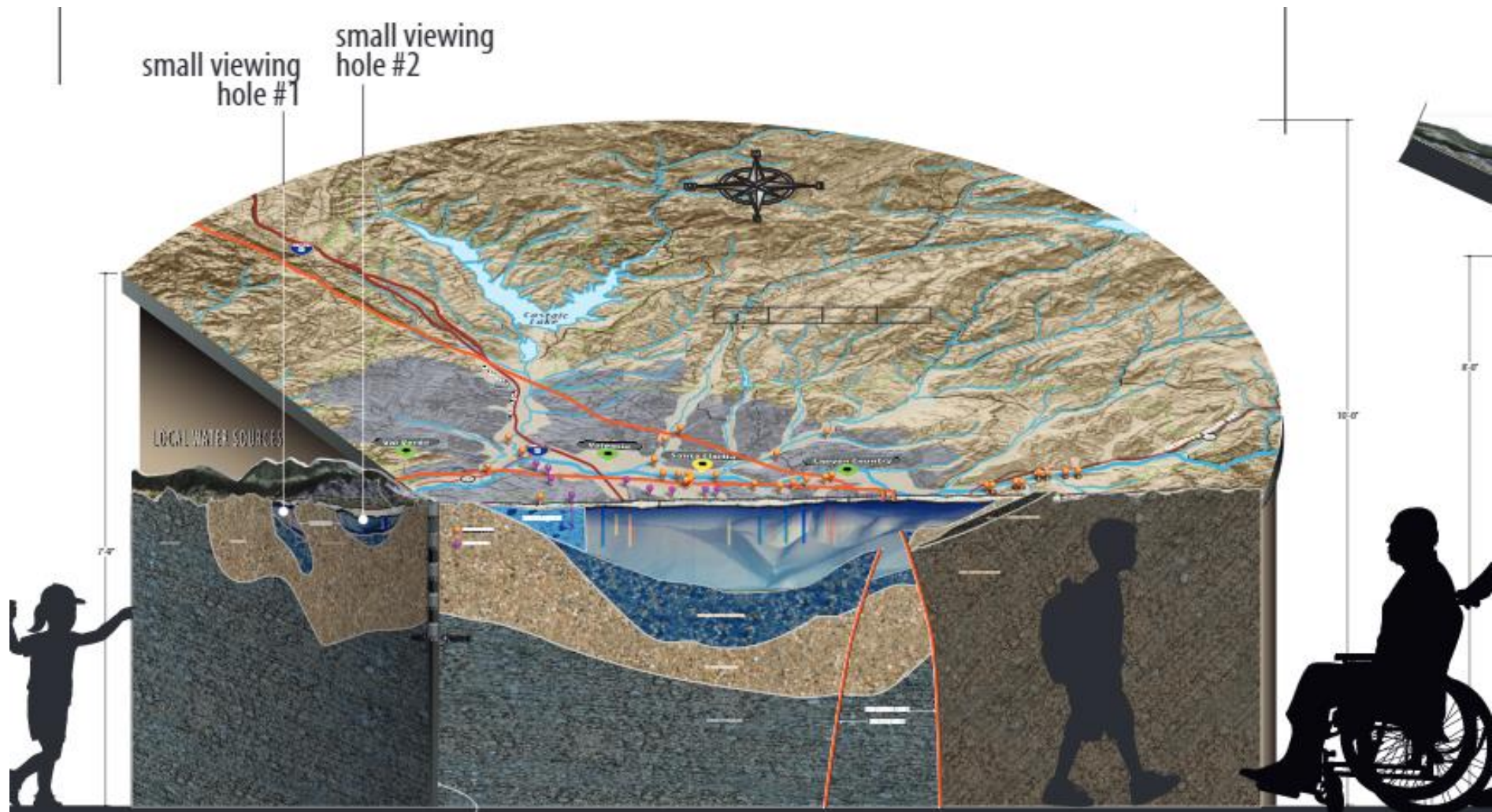
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# Local Aquifers - Exhibit Design



# 3D Model Demonstration





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(Sample 3-D Model screenshots included at the end of the  
presentation slide deck)





# **Engineering Cost Estimate**

# Initial Cost Estimate (March 2022)

## 1. Design Check-In

- a. Hardscape, Landscape, Structures (~\$1.8 Million)
- b. Exhibits (~\$600,000)
- c. Structures Shading Options
  - i. Shade Sails (~\$800,000)
  - ii. Shade Trees
- d. Total Cost Estimate = ~\$3.2 - \$3.5 Million**

# 100% CD Opinion of Probable Cost

## 1. Design Check-In

- a. Construction = \$1,769,446
  - a. Mobilization, Demolition, Hardscape, Landscape, Irrigation, Grading, Drainage, Signage, Amenities, Electric, Potable Water
- b. Exhibits = \$525,000
- c. Structures & Shading Options = \$992,812
  - i. Garden Pavilion
  - ii. Sustainability Shack
  - iii. Shade Sails
- d. Contingency (10%) and CPI (2% for 3 years) = \$550,053

**Total Cost Estimate = \$3,837,310**





# Questions & Discussion





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# Thank You!

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Sustainability Manager  
SCV Water

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# 3-D Model - Grading and Hardscaping



Draft Image Provided for Representation

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# 3-D Model - Exhibits



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# 3-D Model - Trees



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# 3-D Model - Shrubs



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# 3-D Model - Shade Sails



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