Introduction of the project - 2 sites, 1 larger site, 1 small Introduction of Sustainable Solano https://sustainablesolano.org/hoa/

Introduction of Michael Wedgley (the designer and biology technician)

Michael Wedgley is a Bay Area native and a Permaculture Designer who specializes in edible and native landscapes, as well as applied microbiology for the elimination of pesticides and fertilizers. He is a certified Soil Foodweb Lab Technician assessing the microbiome of soils to help growers and gardeners understand the biological needs of their soil, and operates under the business name Soilogical BioSolutions and Designs. He is the founder of the nonprofit organization Transformative Soil and Landscapes, which operates primarily in Contra Costa County and organizes the community around installing regenerative food forests in people's yards and in community gardens. His love for nature and food are often brought together in residential homes to help people design their landscapes into foodscapes that provide the best quality food available while integrating rainwater catchment, aesthetics, nature, and biology.

- Permaculture Designer
- Water Harvesting Designer
- Soil Foodweb Certified Lab Technician
- Started a nonprofit in Contra Costa County titled Transformative Soil and Landscapes
- Designer and consultant under the name Soilogical BioSolutions and Designs

Introduction to Permaculture

- What is Permaculture?
 - Permaculture is an approach to land management that adopts arrangements observed in flourishing natural ecosystems. It includes a set of design principles derived using whole systems thinking. It uses these principles in fields such as regenerative agriculture, rewilding, and community resilience.'
- What is "whole systems thinking"?
 Nature doesn't create anything to stand alone. Every aspect in a landscape works in harmony. When we put in a tree, we don't just drop a random tree into a landscape. We take into account all of it's necessary inputs and all of its outputs. We connect other elements in the design to support the needed inputs and utilize the outputs.

Rainwater Catchment

- Downspout harvesting
- Basins and Swales
- Soil with organic matter and biology absorbs and holds water

Approach to the Design and Plant Selection

- Not landscaping naturescaping
 - Beauty is not just seen with our eyes, it's experienced by all of our senses. These
 designs are meant to evoke a connection in our subconscious that puts us at ease

and gives us a sense of being a part of nature. They go beyond the sterile traditional landscaping, and evoke life through naturescaping.

- Aesthetic appeal prioritized
- Focus on bringing nature into the landscape (focus on butterflies and hummingbirds)
- Natives prioritized
- Smell is considered hummingbird sage, lavender, etc.
- Low water usage prioritized
- Small amounts of harvestable herbs that don't create a mess
 - o White Sage, Lavender, Yarrow, Black Elderberry, Silverberry, Oregano, Thyme
- Low maintenance prioritized

Biological Plan

- Refer to the the biology primer
- No pesticides, no fertilizer healthier and safer for the community
- Improved soil means water holding capacity increased
- Amazingly healthy looking plants



Testate Amoeba



Bacterial Feeding Nematode



