

## Gardening By Nature's Design – Lois Simonds

### A Permaculture Approach to a California Native Plants Garden

Welcome to a permaculture approach to a California native plants garden.

The design begins with observing what is currently happening on the land- its location and its topography. Here the slope of the hillside and its erosion from rainfall become my starting point: how can I prevent the loss of soil and its nutrients and capture the rainfall for the benefit of the land and the plants? How do I work with the existing beautiful oak tree to ensure its health? How do I create a native plant community that provides a safe, abundant habitat for birds, butterflies, snakes and lizards and connects the homeowners with their land and the nature that surrounds them?

### Description of the video following the 12 Principles of Permaculture

This hillside garden design uses a permaculture approach to the landscape

Observe and interact – I saw the erosion on this hillside. While the slope down the hillside was steep the slope across the hillside ranged from 0-2%- perfect for catching rainwater with a wetlands, dry creek bed and swales. After checking the soil for percolation (how well the soil allows water to flow), I saw that this soil both captures (absorbs moisture) and releases it. Perfect for rainwater harvesting.

Catch & store energy – the wetlands, dry creek bed and swales would capture rainwater. This captured rainwater would raise the water table – thus making water available to plants for a longer period of time after the rain season, once the plants were established. Water from the roof is brought into one of the hillside swales. Water from the house basement's sump pump was eroding one side of the hillside. This water I redirected to another wetlands on flatter land. In all instances I'm working with the topography of the land.

Obtain a yield – the native plants provide berries (coffeeberry plants, manzanitas, snowberry plant, native currants, etc.) and seeds (all the sedges and grasses and reeds) for birds as well as habitat.

The garden plants are arranged so that birds can safely travel from trees to shrub trees to perennials and grasses. Milkweed has been planted to bring in the Monarch butterflies (and it has!) whose population has greatly declined.

Apply self regulation and feedback – because of the steepness of the hillside the hillside wetlands has an overflow swale to continue to absorb the water across the

hillside. (once the soil reaches saturation, I didn't want the water to overflow down the steep hillside.) So initially the wetlands is only set up to accept naturally falling rainwater. Water from the roof is not directed into this wetlands. Instead the flow of this

roof water is broken and absorbed by the stone retaining walls stacked on the hillside. The retaining walls also moderate the slope of the hillside gentling the flow of water and making it more readily absorbed into the hillside and available for plants. Also the nutrients in the soil are not washed down the hillside.

The soil is tested at the beginning of the project and any imbalances for a successful planting of California natives are corrected.

Use and value renewable resources –

initially stabilizing the hillside with jute and mulch; only allowing oak leaves to surround the oak tree which provides micorrhizae specific to the oak that enhance the oak's immune system

Design from patterns to details –

capturing water- with wetlands, etc. and dry stack stone walls- follows the slope of a hillside and the flow of water down a hillside and works form the topographical pattern

planting with California native plant communities in accord with the geographic location and relation to one another and the oak tree habitat, not imposing upon the land and place, but working with and in accordance with it

Integrate – creating the dry creek bed, wetlands and overflow swale so they work together and are a natural part of the hillside.

placing the stone walls so that they are an integral part of the hillside and do not impose an extra weight/load on the hillside. The stone walls are set deep into the hillside and placed apart so that they do not create an extra load on the other walls & the hillside can naturally absorb the weight.

Small & slow solutions – all the above

Use edges – the planting on the edge of the garden was selected to blend into the neighbor's garden thus extending the garden view

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There are two ways to get to the video:

1) from my website on the "Links Page" HERE:

<http://www.gardeningbynaturesdesign.com/links> and 2) from my YouTube Channel

HERE: <https://youtu.be/IIopld6jQ7A>.