

Intro to Permaculture Design as a Response to Zones and Sectors Video Transcript

Here's where we see how the design of this property is a response to the site conditions, and how the zones and sectors are made into a design.

See how the Zone 4 shelterbelt wraps around the East, West and North sides of the houses? This is essentially creating two sun facing bowls where the tall trees do not impede the homes' or gardens' access to the sunlight. In fact, no tall trees are on the sun side of the houses, only shorter orchard trees. The solar access to the buildings is left open to absorb the low winter sun. In the smaller house, the pond is on the sun side as well, and will reflect more light into the structure.

So we can see that the sunny irrigated garden area is nested within a Zone 4 shelterbelt, maintaining solar access. Remember from our sectors that the main wildfire risk sector is from the Northwest. So there are grazed and irrigated orchards, ponds, gardens, and roadways all placed between the structures and the likely direction of wildfire.

Remember also from our sector diagram that there are cold winds from the South and drying spring and summer winds from the Southeast. Both of these winds will hit the shelterbelt and be weakened and diffused before they enter the site.

I'd like to note the ponds as well. They are placed in a valley where water is entering the site, and are used for raising fish to moderate the temperature by radiating heat in winter and cool in summer, and can be sources of irrigation and fire fighting.