



Land Resilience Partnership White Paper Ventura River Watershed

Summary: The Ventura River Watershed has been identified for its extreme vulnerability to climate change, including fire, flooding, and water insecurities. Ventura County residents, particularly those from disadvantaged communities, are vulnerable to these impacts. Currently, over 90 land stewards in Ventura County have signed up for the Land Resilience Partnership (LRP), a direct technical assistance program providing access to local on-site land and water management tools that create healthy, fire resilient communities. While the program continues to engage more residents and community members, there is insufficient capacity to offer implementation at scale. There is a critical need for a trained workforce to implement projects identified by the LRP and its partners to enhance fire resiliency throughout Ventura County.

The Land Resilience Partnership connects residential, commercial, and institutional participants with partner organizations and technical experts to improve and enhance properties. The on-site management tools promoted by the partnership include native and fire resilient landscaping, hydrated buffer strips, rainwater harvesting, greywater reuse, and stormwater management.

The LRP works with partners to engage land stewards throughout Ventura County. As partners continue to sign up to the growing list of land stewards and more projects are identified and designed, there is a succinct and growing need for a workforce that has the skills, experience, and technical expertise to implement these resilience projects, with a priority on realizing projects in disadvantaged and low-income communities.

The LRP program partners include:

- Ventura County Resource Conservation District (VCRCD)
- Ventura River Watershed Council
- City of Ojai
- Ojai Unified School District
- Ventura River Water District
- Senior Canyon Mutual Company
- Tuolumne County Resource Conservation District (TCRCD)

The LRP currently operates in partnership with Resource Conservation Districts in two counties in California. As the program grows and engages more regions vulnerable to the extreme effects of climate change, there will continue to be a need for a workforce of trained professionals to help realize and implement resiliency projects throughout California.

At a local scale, the LRP has a profound impact in providing opportunities for members to partake in the multiple benefits of onsite water management. When aggregated at the watershed scale, these approaches improve watershed biodiversity and create resilient communities. Multiple benefits of tools implemented by the workforce development program include:

- **Fire Resilience:** Greywater and rainwater irrigated landscapes are well hydrated and fire resistant without using up city water or groundwater. Climate appropriate plantings are well adapted to fire.
- **Extreme Heat Reduction:** Trees provide cool shade, which counteracts the urban heat island effect which raises temperatures in cities, contributing to public health concerns such as heat stroke, increased asthma rates and smog.
- **Improved Water Security:** Rainwater tanks are safe and reliable sources of water through drought or disaster. Tools that recharge groundwater like greywater reuse, stormwater gardens and climate appropriate planting ensure robust groundwater supplies will last through drought.
- **Improved Water Quality:** Rainwater harvesting and stormwater gardens reduce the volume of runoff entering rivers, while stormwater gardens and climate appropriate plants clean and cool water, improving wildlife habitat and drinking water quality.
- **Equitable Communities:** Decentralized water harvesting and reuse, as well as other resilience tools expand access to local healthy food, clean water and other environmental benefits. They help communities approach resource problems in a collaborative, opportunity rich way.
- **Food Security:** Greywater reuse is a strategy used to irrigate fruit and nut trees and food-producing shrubs, contributing to food security and localizing food supplies. Rainwater harvesting can support irrigation of all food crops.
- **Flood Mitigation:** Rainwater capture and storm gardens help reduce flooding and bring the water cycle back into balance.
- **Habitat Creation:** Stormwater gardens, greywater and rainwater irrigated landscapes and climate appropriate plantings provide critical habitat for wildlife.
- **Groundwater Recharge:** Stormwater gardens and greywater reuse slow water, giving it a chance to sink into the ground and recharge groundwater supplies rather than flowing down storm drainages and rivers to the ocean.
- **Increased Stream Flows:** When groundwater levels rise from the impacts of greywater reuse, stormwater gardens, rainwater harvesting and climate appropriate plantings, natural springs become more robust, discharging groundwater slowly and consistently into waterways.
- **Soil Health:** Rainwater, mulching, carbon farming and greywater reuse all contribute to soil health by adding humidity, carbon and nutrients.