



## University of Hawai'i Master Gardener Program

# Rain Gardens for Hawaii's Water Quality

**Ko'olaupoko Rain Garden Co-op and Cost Share Program**

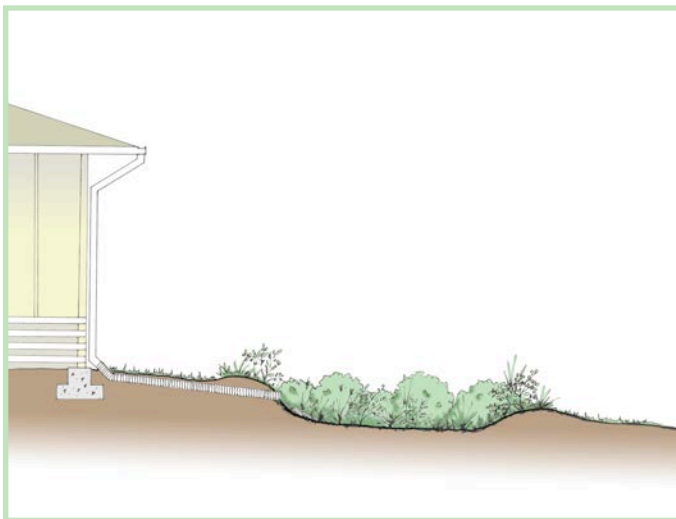
***Hawaii Residential Rain Garden Manual***

**by Todd A. Cullison, Executive Director, Hui o Ko'olaupoko**

Watershed development including homes, roads, parking lots, commercial sites and other impervious surfaces all contribute to an increase of polluted storm water negatively impacting Hawaii's water resources. Pollutants such as fertilizers, pesticides and sediment flow across impervious surfaces during rains and pollute streams, ocean and coral reefs. However, there are a number of actions homeowners can take to protect water quality. The newest technology available in Hawaii for proactive homeowners is to construct a rain garden in your yard to capture polluted storm water. A rain garden is an effective low-cost tool for private homeowners to proactively address water quality concerns while enhancing their property's landscaping.

A rain garden is a deliberately build depression planted with native vegetation that allows storm water from impervious surfaces to collect, briefly settle, then infiltrate into the ground.

Hui o Ko'olaupoko (HOK), a windward O'ahu based non-profit implementing watershed restoration and education seeks private homeowners to participate in its, Rain Garden Co-op and Cost Share Program. The program is targeted at residential homeowners living in Ko'olaupoko and aimed at addressing water quality issues. The project seeks homeowners who are interested in constructing rain gardens to reduce the amount of storm water runoff reaching streams and the ocean while enhancing their yards' landscaping.



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The co-op seeks homeowners in various areas of Ko'olaupoko to install rain gardens in cooperation with their neighbors for a greater impact. Funds are available to cover the material cost for such items as plants and soil with the rain gardens built by the homeowners, volunteers, neighbors and HOK. The basis of the co-op is to help your neighbor built a rain garden, in exchange; others will help build one on your property.

Certain restrictions apply and some areas are higher priority for rain gardens for the cost share portion of the project.

HOK also produced the **Hawaii Residential Rain Garden Manual**, available in mid-March. The Manual is a step-by-step guide that provides information on proper rain garden location, size, native plant selection and rain garden maintenance. The Manual can be utilized across the state of Hawaii.

If you are interested in learning more about the cost share program or having a rain garden training for your group, contact Todd Cullison at 808-277-5611 or [tcullison@hawaii.rr.com](mailto:tcullison@hawaii.rr.com). You can learn more about rain gardens on HOK's website at, [www.huihawaii.org/raingardens.html](http://www.huihawaii.org/raingardens.html). You can also visit He'eia State Park to view a recently constructed rain garden.



Students from Hawaii Pacific University's Natural Resource Management program plant native vegetation at a recently built rain garden at their campus.



Project grant funds for the manual and cost share program come from the U.S. Environmental Protection Agency and the State of Hawai'i, Clean Water Branch, Polluted Control Runoff.



Mature vegetation at He'eia State Park's rain garden:

ahu'awa, (*Cyperus javanicus*)  
'ohai (*Sesbania tomentosa*)  
'ākia (*Wikstroemia uva-ursi*)  
carex (*Carex wahuensis*)