



KŌKUA

Caring for the future of the State of Hawai'i, The Department of Land and Natural Resources' "The Rain Follows the Forest" watershed protection plan will ensure that Hawai'i's precious forests are protected by:

- 1 Restoring and protecting our forests through controlling invasive weeds and animals, and monitoring forest threats such as fire, predators and natural diseases
- 2 Employing over 150 FTE Hawai'i residents with a variety of natural resources jobs
- 3 Over the next 10 years, doubling the amount of priority watershed protection acreage in Hawai'i and thus protecting our freshwater sources, beaches, ecotourism and marine ecosystems
- 4 Educating Hawai'i's residents and visitors about the cultural, economic, and environmental importance of conserving native forests



THE RAIN FOLLOWS THE FOREST



THE RAIN FOLLOWS THE FOREST

UNIVERSITY OF HAWAII • MANOA CENTER FOR RESEARCH & TRAINING • CONSERVATION NATIONAL TROPICAL HAWAII DEPARTMENT OF RESOURCES, DIVISION OF U.S. DEPARTMENT OF FOREST SERVICE - REGION • U.S. FISH & ECOLOGICAL DEPARTMENT OF RESOURCES, RESOURCES HAWAII DEPARTMENT OF AGRICULTURE • NOAA NATIONAL SANCTUARIES PROGRAM • NOAA NATIONAL MARINE FISHERIES SERVICE • BISHOP MUSEUM •

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE • OFFICE OF HAWAIIAN AFFAIRS U.S. DEPARTMENT OF DEFENSE ARMY GARRISON • NATIONAL WILDLIFE REFUGE COMPLEX • KAMEHAMEHA SCHOOLS • HAWAII NATURAL RESOURCES PROGRAM • U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE, PACIFIC SOUTHWEST RESEARCH STATION • U.S. GEOLOGICAL SURVEY - PACIFIC ISLAND ECOSYSTEMS RESEARCH CENTER U.S. FISH & WILDLIFE SERVICE NATIONAL PARK SERVICE

HAHAI NO KA UA I KA ULULĀ'AU

Created by the Hawai'i Conservation Alliance in support of The Rain Follows the Forest: A Plan to Replenish Hawai'i's Source of Water



HAWAII CONSERVATION ALLIANCE
www.hawaiiconservation.org

FRESH WATER

OUR STREAMS ARE SACRED



fresh water. The Hawaiian Islands contain over 400 perennial streams, which provide vital ecological and social services for both native organisms and human communities. These streams support over 150 native aquatic species, including many types of fishes, prawns, mollusks and insects found nowhere else on earth. Such streams are also fundamental to traditional Hawaiian culture, providing water essential to the cultivation of taro and other Hawaiian staples, as well as serving the needs of modern society in regard to drinking water and agricultural uses.

In the past 12 YEARS, rainfall in Hawai'i has declined 12%

watersheds. The flow from Hawai'i's streams is variable and vulnerable to ecological changes and poor land use practices. Approximately 30 percent of mean annual rainfall in Hawai'i ends up as streamflow,

but this percentage can drop markedly in areas where forests have been lost or degraded. Climate change over the past 100 years has also caused a reduction in streamflow, with many gauges recording declines of over 1 percent per year, linked to corresponding declines in rainfall. This reinforces the need to properly manage the native forests that capture and release water in a steady fashion. Such forests now cover less than half their former extent, having been degraded by fire, invasive ungulates, and non-native plant species that create

forests with lower water retention capacity. Conserving remaining native forest is an essential step in conserving stream flow, and its associated benefits for both nature and society.

MĀLAMA OUR WATERSHEDS.

HEALTHY NATIVE FOREST = ↑↑ WATER CAPTURE

By condensing passing clouds and reducing erosion, a healthy native forest can increase water capture by **50%!**

MĀLAMA OUR FRESH WATER SUPPLY.

DID YOU KNOW?

It takes one raindrop **25 YEARS** to pass through mountain top native forest to an aquifer.