



# The Rain Follows the Forest

PROTECTING OUR MAUKA FORESTS: THE SOURCE OF FRESH WATER



**The Watershed Initiative is working to ensure fresh water is available for the people of Hawai'i in perpetuity by protecting our watershed forests.**

- Safeguarding our water supplies is one of the central natural resource goals of the Abercrombie Administration's *A New Day in Hawai'i* plan.
- Protecting *mauka* forests is the most cost effective and efficient way to replenish groundwater. Forests absorb mist and fog, increasing water capture up to 50 percent more than rainfall alone.



**Over half of Hawai'i's forest have been lost in the last 200 years.**

- Without protection, forest degradation continues to accelerate. Invasive alien (non-native) species trample and devour vegetation, leaving bare ground or openings for alien plants that consume more water and increase runoff.
- The administration's goal of doubling the number of acres of watershed forest being protected over the next decade requires approximately \$11 million per year.
- The protection of forests is also essential to prevent erosion that muddies beaches, coral reefs, fisheries, reduce Hawai'i's greenhouse gas emissions, and protect the native plants and animals unique to our islands and sacred to Hawaiian culture.



For more information and references, visit [dlnr.hawaii.gov/rain](http://dlnr.hawaii.gov/rain)



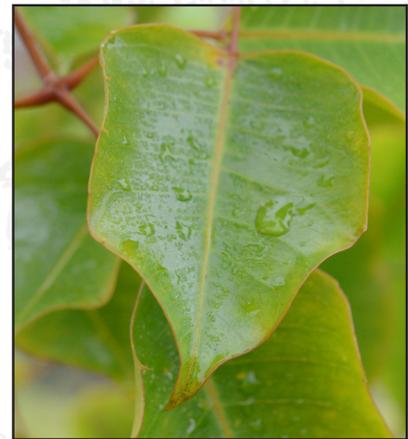
# The Rain Follows the Forest

PROTECTING OUR MAUKA FORESTS: THE SOURCE OF FRESH WATER



## Hawai'i's water supplies are under threat from hotter and drier conditions from climate change, as well as loss of watershed forests.

- Climate change is bringing hotter and drier conditions to Hawai'i, threatening the survival of our watershed forests and water supplies.
- A century-long trend of declining rainfall has accelerated, with a 12% decline in the last 20 years alone.
- Groundwater head levels in Pearl Harbor have declined by half since 1910. This aquifer supplies over 60% of O'ahu's municipal water.
- The loss of native forests come at a high cost.
- A University of Hawai'i study calculated Oahu's Ko'olau forests have a net present value of between \$7.4 and \$14 billion.
- In East Hawai'i invasive plants have already reduced estimated groundwater recharge by 85 million gallons a day.
- In October 2011 statewide survey of 700 residents, 78% of respondents were supportive of increasing funding for watershed protection from \$1 million to \$11 million per year.



## The longer Hawai'i waits to take significant action, the higher the cost will be to reverse the damage, thereby threatening water supplies for future generations



For more information and references, visit [dlnr.hawaii.gov/rain](http://dlnr.hawaii.gov/rain)