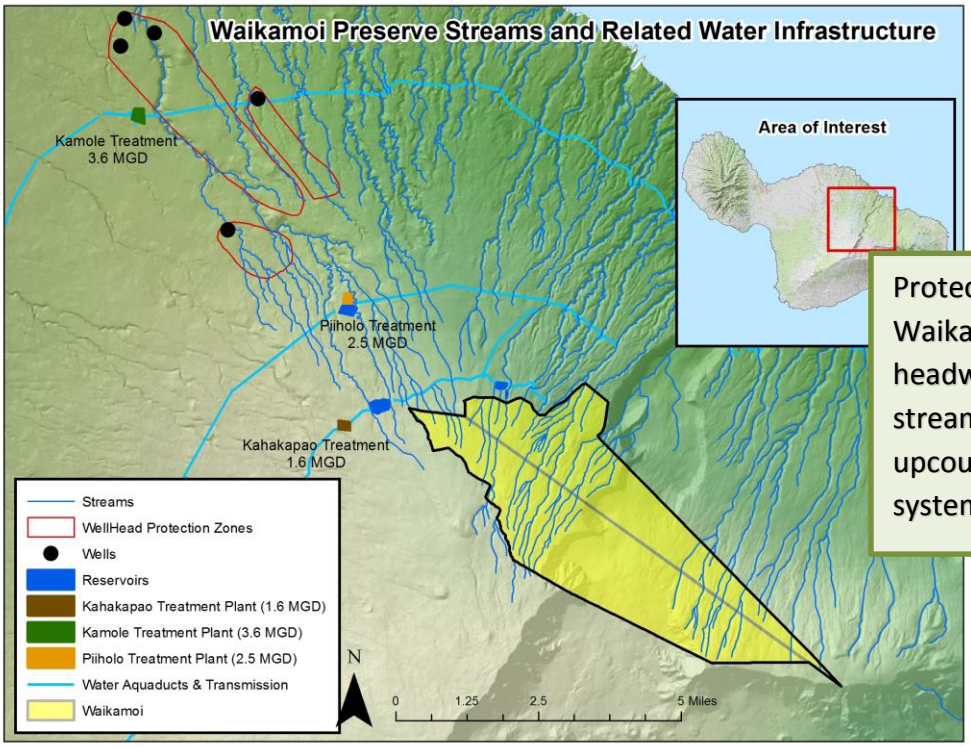
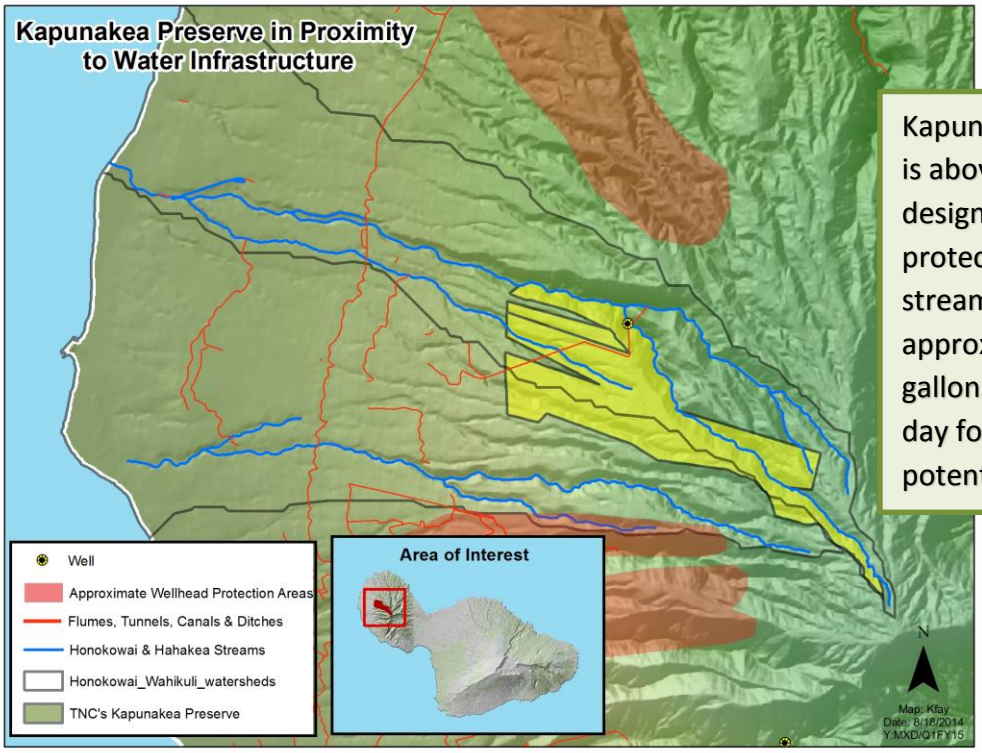
The Nature Conservancy's Maui Program
Watershed Grants Program

Waikamoi Preserve, East Maui and Kapunakea Preserve, West Maui



Protecting the upland forest at Waikamoi protects the headwaters for more than 10 streams that feed into the DWS upcountry water collection system.



Kapunakea's forested watershed is above and adjacent to county designated source water protection areas. Honokōwai stream produces on average approximately 3.5 million gallons per day of fresh water a day for agricultural and potentially domestic use.

Research shows that:

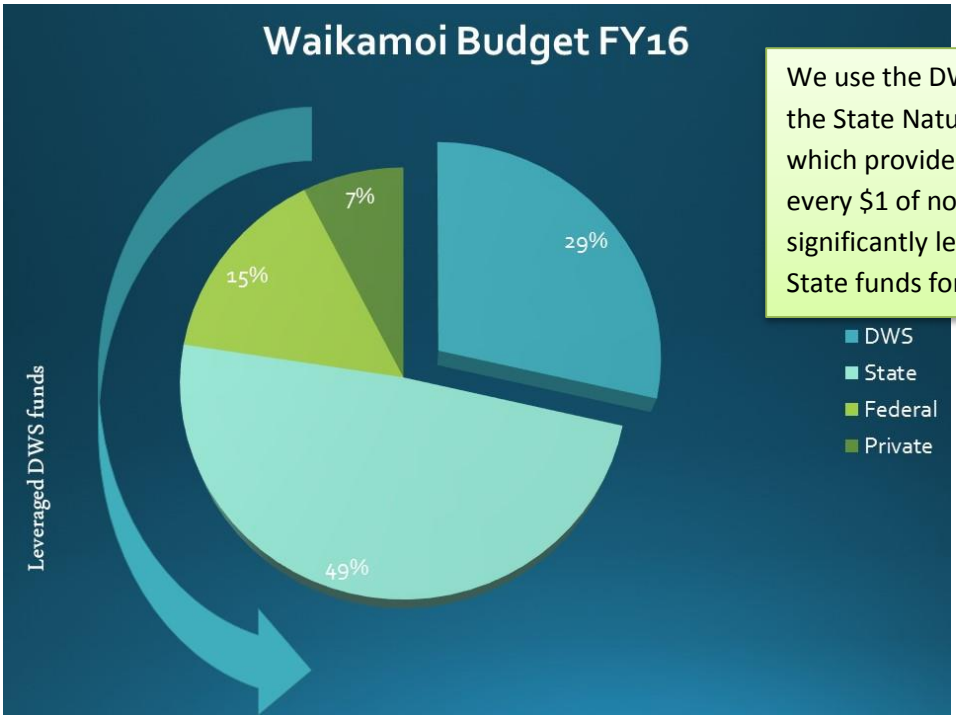
- Conversion of a non-native forest to a native forest increases mean annual groundwater recharge in Hawaii's aquifers by 12%.
- $43.2 million worth of conservation work in the Koʻolau Mountains could translate into more than $900 million worth of water.
- Invasive strawberry guava evapotranspires 27 to 53 percent more water than native forest, causing extensive water loss across landscapes.
- East Maui's native forest is already threatened by the effects of a changing climate. For example, a century-long trend of declining rainfall has accelerated, with a 12 percent decline in the last 20 years.

Project Goals:

- Remove all ungulates from fenced, native-dominant areas
- Prevent ungulate ingress into native-dominant areas
- Enhance the effectiveness of boundary and strategic fences
- Continue replacement of Kapunakea Preserve lower boundary fence
- Remove habitat-modifying weeds from high-quality native habitats
- Prevent the introduction or spread of problem weeds
- Prevent the establishment and spread of habitat-modifying priority weeds
- Support and assist USGS in implementing a study of hydrologic impacts of invasive plant species
- Prevent the introduction and spread of small mammals, non-native insects, mollusks, pathogens, and other pests deemed to be a significant threat, and reduce their negative impact where possible
- Conduct and support monitoring and research to track the status of biological and physical resources of the preserve
- Maintain spatial and other data sufficient to measure success and inform adaptive management, policy makers, and funders
- Prevent the extinction of rare species in the preserve
- Encourage and assist with research that increases our understanding and management of the area's natural resources
- Build public understanding and support for the management of the watershed and preservation of natural areas
- Provide staff with training and equipment that will allow them to assist primary fire and rescue agencies during a fire or emergency on or adjacent to the preserve

Project Benefits:

- Improved groundwater recharge ability through protection and enhancement of native canopy and ground cover
- Reduced damage to watershed forest vegetation and soil disturbance as a result of pig and other ungulate damage
- Improved watershed protection and function specific to the upcountry water system drainage area at Olinda, Pi'iholo and Kamole water supply
- Improved watershed protection and function specific to streams and wellhead protection systems within and adjacent to Kapunakea
- Continued protection of vitally important headwaters for major streams in the East Maui and West Maui
- Reduced nonpoint source pollution, runoff, and sedimentation in the Honokōwai stream system and makai nearshore areas of Kā'anapali and Honokōwai
- Potential recovery of listed endangered plant and animal species through the protection of intact native montane forest systems
- Climate change adaptation by maintaining ecosystem resilience
- Leveraged funds and conservation actions
- Conservation awareness and engagement to the local community
- Documentation of conservation successes



We use the DWS funding as match for the State Natural Area Preserve program which provides $2 of state funding for every $1 of non-state match. We significantly leverage both County and State funds for private and federal