Hau'ula to Punalu'u Watershed Snapshot



LOCAL MEASURES OF AHUPUA'A HEALTH

The Watershed Snapshot is a status report on the health of our *ahupua*'a, or watershed. In consultation with the Hawai'i Conservation Alliance, communities across the state identified metrics that would best define the health of their *ahupua*'a. Available data from resource management organizations was compiled to inform the selected metrics, and communities also collected socio-economic, and local *kūpuna* (elder) knowledge. An online library of all available watershed related data has been created as a public resource and can be found by visiting hca.maps.arcgis.com. The information compiled in a suite of communication tools will help inform, guide and garner support for increasing *mauka* to *makai* management efforts. Visit www.hawaiiconservation.org/communitysnapshot for more information.

"THE KŪPUNA TELL US THERE IS LESS WATER IN THE STREAMS, AND THE SCIENTISTS TELL US THAT NOT ONLY IS THERE LESS RAINFALL, BUT THE SPREAD OF INVASIVE TREES MEANS THE FOREST HOLDS ONTO EVEN LESS WATER THAN THEY USED TO. WE NEED HEALTHY FORESTS TO ENSURE THAT HAU'ULA STILL HAS CLEAN, FLOWING WATER IN THE FUTURE."

- KAWIKA WINTER, PH.D. NATIONAL TROPICAL BOTANICAL GARDEN

'IWA (FREGATA MINOR)

RAIN GAUGE STATION

PUNALU'U STREAM



27% NATIVE FOREST COVER (2011)



ALMOST HALF OF THE 698 TOTAL CESSPOOLS ARE 200 FT FROM A STREAM OR SHORELINE

KÕLEA (PACIFIC GOLDEN PLOVER)

KALUANUI STREAM

MALINAWII A HEIAII

MA'AKUA STREAM

KAIPĀPA'U STREAM

WAIPILOPILO STREAM



HEIA

PUEO (HAWAIIAN SH

UALITY MONITORING STATION



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WATER QUALITY MONITORING STATI



'AUKU'U
(BLACK CROWNED NIGHT HERON)



"THE NUMBERS OF NEAR SHORE REEF FISH SUCH AS UHU HAVE DECREASED OVER THE YEARS LIKELY DUE TO A COMBINATION OF FACTORS INCLUDING A LOSS OF CORAL HABITAT, OVER HARVESTING OF FISH, AND DECREASED WATER QUALITY FROM POLLUTION SUCH AS SEDIMENT RUNOFF FROM LAND

RAIN GAUGE STATION

43% CORAL COVERAGE (10%-50% DENSITY)

WATER QUALITY MONITORING STATION



"THE OCEANS NEEDS TO DRINK. THE ZONE WHERE THE WAI (FRESHWATER) FROM THE LAND MEETS THE KAI (OCEAN WATER) IS WHERE THE LIMU GROWS, AND IS THE NURSERY FOR MARINE AND STREAM LIFE. WE NEED GOOD QUALITY WATER FLOWING FROM MAUKA SO THAT THE OCEAN CAN BE FULL OF FOOD."

– UNCLE HENRY CHANG WO, LIMU LOEA (EXPERT), (1941 -

















