

wonder and respect for Hawaii's marine life.

05/08/2024

Dear Chair Chang & Board of Land and Natural Resources Members and Staff

Re: Agenda Item C.2 - Pōhakea Watershed Acquisition (also known as Māʿalaea Mauka) on 05/10/24

Maui Ocean Center strongly supports the proposed purchase of the Pōhakea Watershed lands (also known as Māʿalaea Mauka). The purchase of these lands to expand the state forest reserve is an absolute necessity for the future well-being and safety of the West Maui community.

Excessive sedimentation and excessive nutrients are the number 1 and 2 reasons for near shore marine eco system degradation. Both of these conditions have been present in Ma'alaea for decades and as a result our marine embayment is classified as a 303d, impaired body of water, by DOH/EPA for specifically for these two



Figure 1 Gulch Facing Makai



reasons. Coral Reef coverage in the Bay is estimated less than 8% when in 1975 it was estimated to be +75% and Limu has become much harder to find. I wanted to specifically share these photos with you all so you can actually see the damage with your own eyes; words and data will go only so far and often fail to touch us like photos can.

First four photos show the damage on land from one gulch out of several on this particular land (TMK: (2) 3-6-001:018). Hawaii Legacy Land Commissioners visited the site in March 2022 and witnessed first hand the condition of the land and saw how deep the gulches were; 30'+ in this particular gulch. Figure 4 shows the large storm drain ingress almost completely blocked with debris and earth.



Figure 2 Gulch Facing Mauka A

Figure 3 Gulch Facing Mauka B



Figure 4 Gulch Facing Makai at the Storm Drain Ingress

The remaining four photos show what happens downstream when there is a storm event impacting the Ma'alaea Harbor and the Bay. This particular storm event happened in December of 2018. I have been involved with Ma'alaea community since 2002 and I have witnessed many of these events over that time span. To me personally it seems like the severity of these brown out conditions have increased over the years.

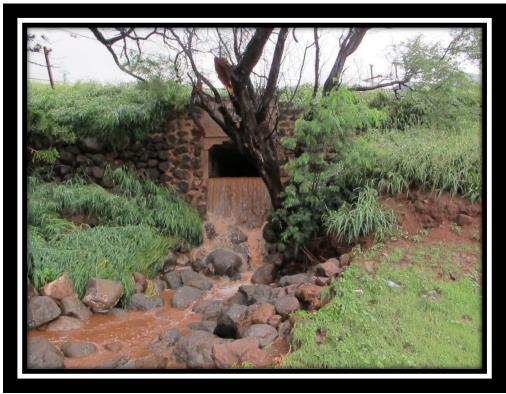


Figure 5 Storm Channel Discharge to Ma'alaea Harbor



Figure 6 Sedimentation Overflow Ma'alaea Harbor at the Boat Ramp



Figure 7 Brown Out Condition - Sedimentation Overflow Ma'alaea Bay at Harbor Groin



Figure 8 Brown Out Condition - Ma'alaea Harbor

There are many peer reviewed science reports demonstrating the importance of land-sea interactions. Many of the papers cited here are co-authored by Robert H. Richmond, a pre-eminent research professor at UH Manoa Kewalo Marine Laboratory. If one is inclined to learn more about this topic I highly recommend the below papers.

https://www.sciencedirect.com/science/article/pii/B9780128140031000265

http://www.kewalo.hawaii.edu/docs/richmond/2003Wolanski.pdf

http://www.kewalo.hawaii.edu/docs/richmond/2009Wolanski.pdf

https://academic.oup.com/bioscience/article/57/7/598/238531?login=false

https://academic.oup.com/bioscience/article/57/7/598/238531

This particular land area in question is the main source for excessive sedimentation degrading the near shore marine ecosystems in Ma'alaea. It needs to stop if we ever wish to see vibrant near shore marine ecosystem recover in our Community. I urge BLNR to pursue any and all avenues to secure this land for the public trust and restoration of the watershed. Thank you.

Aloha,

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