Hawaii imports over 90% of its food. This dependency on outside sources places residents directly at risk for food shortages in the event of natural disasters or other factors. Additionally, many Hawaii residents are already at risk of going hungry. The Maui Food Bank currently serves 10,000 people a month who don’t have enough to eat. With so much open space on Maui, why can’t we use some of it to feed our community and provide resources with the resiliency that will make us self-sufficient? After learning about the current structures on Maui, I immediately started to do something here on Maui. Not only does the edible forest garden provide food and bring the community together, but it also rehabilitates the local ecosystems. In years and years of plantation farming destroying much of the land, Maui is in need of this type of project.

Introduction

I wanted to explore locations of government owned land on Maui that is not currently being used, and determine if those locations would be suitable for food forests and/or urban community farms.

Problem Statement

First, I needed to know what land is designated as open space. Then I needed to determine what land is owned by the state or local government. I also wanted to explore areas that are already designated as project sites to see if any open space would be available in those locations. I started with a base map from The Nature Conservancy Hawaii that contains historical and current ecosystems. Next I added in data layers that contain open space from CCAP, and project sites, urban growth boundaries and government owned land from the County of Maui. I examined open space with project sites, open space with government-owned land, and then intersected these two new layers creating another new layer. Then I created a quarter mile buffer zone around the new layer.

Methodology

I wanted to explore locations of government owned land on Maui that is not currently being used, and determine if those locations would be suitable for food forests and/or urban community farms.

Results & Discussion

Based on the map data, I was able to determine that there are approximately 900 acres of open space on Maui that can potentially be used to grow food.

References


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