

## Genki Ala Wai: Bokashi Method Project

### Duration of Project

Within about 3-5 months of throwing the Genki balls in the Ala Wai Canal we should be able to see a significant change in the amount of sludge and pollution.

### Project Purpose

The purpose of this project is to make the Ala Wai Canal a healthier place with less pollution.

### Project Summary

- **Ecosystem Restoration:** the Genki balls contain effective microorganisms which essentially eat the sludge at the bottom of the canal and restore the original environment.
- **Flood Mitigation:** consumption of the sludge reduces the overall volume of the water within the Ala Wai, helping to prevent flooding.
- **Community education and engagement, cultural connections:** Part of the proposal is a community program in which the public is educated about and makes the Genki Mudballs. They will also be able to learn about how the Ala Wai and it's ecosystem has been affected by the human sourced pollution.
- **Community access mobility and recreation:** Gaining control over the bacterial pollution in the water makes the Ala Wai a safer place for anyone wanting to do activities within it. This includes surfers, paddlers...etc.
- **Economic Health & Resilience:** Genki balls would not need to be maintained or monitored after being placed in the water. What will have to be maintained is the future release of pollutants into the canal.
- **Early action identification:** In addition to the days of making the bokashi balls and placing them into the water along with EM solution, other days could be dedicated to cleaning large pieces of litter and trash from and around the Ala Wai canal once the water is cleaner. In the long term, less nonsensical policies on pollution need to be put in place and be accepted by all branches of government responsible for the canal. Additionally days can be dedicated to awareness and cleanup of not only the Ala Wai but also all natural ecosystems in Hawaii.

### Genki Balls, EM, and how they will be used

Genki balls are made from a mixture of Molasses, Bokashi, ceramic powder, soil, water, and EM solution. EM stands for Effective Microorganisms and refers to a collection of healthy bacteria within it. These healthy bacteria housed and fed in the Genki Balls will digest the sludge and help restore the Ala Wai's natural ecosystem. It also oxygenates the bottom of the canal where the balls sink to.

This method has been used before in Malaysia, the Philippines, Thailand, and Japan. It's been especially prevalent in the Dotonbori River, located in Osaka, Japan, where millions of Genki Balls were used to clean it.