



## MACZAC

### MACZAC Members:

#### Hawai'i Island

Philip Fernandez  
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#### Kaua'i

Taryn Dizon

#### Lāna'i

Vacant

#### Maui

Donna Brown  
Rich Brunner  
Denver Coon

#### Moloka'i

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#### O'ahu

Scott Sullivan  
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# Marine and Coastal Zone Advocacy Council

## *Ke Kahu O Na Kumu Wai*

July 7, 2023

Ms. Mary Alice Evans  
Interim Director  
State Office of Planning and Sustainable Development  
State Office Tower, 6<sup>th</sup> Floor  
235 S. Beretania Street  
Honolulu, HI 96813

Dear Ms. Evans:

Subject: Production and dissemination of brochure(s) on the muliwai or estuary, a critical habitat connecting the ocean to the stream. This habitat link affirms the 'mauka-makai' perspective for resource management.

The Muliwai Permitted Interaction Group (PIG) met on April 10, 2023, to develop recommendations to the Marine and Coastal Zone Advocacy Council (MACZAC) for the production and dissemination of brochure(s) on the *muliwai*. The intent of these outreach materials is to bring awareness to and elevate the significance of estuaries as critical interface between the ocean and the streams, and to include 'muliwai' into the 'mauka-makai' lexicon. This habitat is an essential nursery habitat for many coastal marine fishes and a gateway to our native stream fauna. The audience for the outreach materials includes State and County agencies, decision makers, fishermen, conservationists, property owners along waterways, and students.

### **Content of this outreach material**

- Definition of an estuary and the different types in Hawai'i
- Benefits of an estuary
  - better coastal water quality and groundwater health
  - healthier coastal fish stocks and native stream fauna
  - improve *limu* health for herbivores and as juvenile habitat
  - expand water bird habitat
  - provide buffer and increased resilience to climate change and coastal hazards
- Risks to estuaries
  - water diversion
  - stream maintenance without regards to fish nursery habitat
  - infill development
- Restoring impacted estuaries
  - removing alien riparian vegetation and replacing with natives
  - controlling alien fish and crustacean species

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- New tool to conduct estuarine surveys
  - eDNA
- Overlapping jurisdiction between agencies
  - decision makers should take these areas into account when permitting
  - encourage State and county partnerships
- Historical infill and development of wetlands

#### **Dissemination of Outreach Material**

- Use multiple outreach material with different topics and focus groups including website for more detailed and related information
- Dissemination of these materials will be at State legislature and County Council meetings
- Public events where Division of Aquatic Resources (DAR), Commission on Water Resource Management (CWRM) and Division of Forestry and Wildlife (DOFAW) are present

#### **Desired Outcome**

- Mauka-Makai becomes Mauka-Muliwai-Makai
- Estuaries recognized as critical habitat for maintaining healthy coastal ocean and stream resources
- Restorative effort to control alien species and replace with natives

Thank you for your consideration and support for the production and dissemination of this outreach material.

Sincerely,

Phil Fernandez  
Chair

cc: Justine Nihipali, Hawai'i CZM Program Manager