

IEM Committee

From: Stacey L. Vinoray
Sent: Monday, July 31, 2017 11:32 AM
To: IEM Committee
Subject: FW: Iem-33
Attachments: IEM-33 Sand Moratorium.docx

From: Patricia Cadiz [mailto:pb5@mac.com]
Sent: Monday, July 31, 2017 12:07 AM
To: IEM Committee <IEM.Committee@mauicounty.us>
Subject: Iem-33

Aloha Chair Cochran and members of the committee;

Please accept the attached testimony for your review.

Please call any time for further clarification if needed.

Respectfully submitted,
Patricia Cadiz
808-283-5070

July 31, 2017

RE: IEM-33

Aloha Chair Cochran and members. My name is Patricia Cadiz.

Thank you for taking on this important issue.

I support all efforts to preserve and protect native Hawaiian cultural, archeological and burial sites. I also support all efforts to preserve and protect our beaches, dunes and the native flora and fauna that depend on a healthy nearshore environment.

As other testifiers have mentioned, one of the important uses of Maui's precious inland sand is beach and dune restoration projects. The Board of Land and Natural Resources and the Commission on Water Resources have set forth very strict guidelines as to what fill material is appropriate for our beaches.

In fact, there is a list of eight detailed limitations, but in particular I would like to bring to the attention of this committee the requirement that, *"Beach fill shall be dominantly composed of naturally occurring carbonate beach or dune sand...non carbonate sands are not allowable under this permit."*

A typical Hawaiian sand beach is primarily calcium carbonate sand – sourced from the **reef**. Our 'white' beaches are mostly composed of the carbonate shells and skeletons of marine organisms. As the reef is built, it is also broken down into sand by other animals and by wave action. These processes make sand for our white/tan sand beaches.

Imported sand from the mainland is sedimentary sand – sand created from eroded rocks. The sand imported from Canada has three important differences from our Maui sand.

- Its sedimentary (from eroded rocks) so it is harder and heavier,
- It's from glacial deposits so it is grey in color, and
- It has a higher volume of powderous fines, which can remain suspended in the water causing unacceptable turbidity.

Simply put, current rules and laws would not permit the use of imported sand for beach preservation and restoration projects.

Dredging of offshore sand has many limitations and complications. The number of Federal, State and local agencies with jurisdiction over a dredging project is somewhere in the teens. If you can even get a permit, it will take multiple years. Emergency erosion situations cannot wait that long.

UH Professor, Dr. Chip Fletcher (2007) says, “Beaches are how we get to the ocean, and beach loss diminishes our ocean culture. We need to maintain and repair these valuable environments for our children and to protect our quality of life.” For many shoreline projects Maui inland dune sand, sourced from the reef, and blown inland over millennia, is often the only viable and available solution for beach preservation.

Mahalo for your careful consideration.