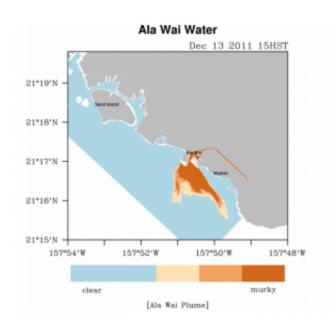


New model can track brown water movement from Ala Wai Canal after rains

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PacIOOS Ala Wai Turbidity Plume Example

Have you ever wondered if you should go into the water after heavy rains? Or questioned where that brown water goes after it leaves the Ala Wai Canal? Oceanographers working with the Pacific Islands Ocean Observing System (PacIOOS) within the UH Mānoa School of Ocean and Earth Sciences and Technology (SOEST) have focused their work to help address these questions, and they are excited to share the results of their labor: the PacIOOS Ala Wai Turbidity Plume Model.

Turbidity is a measure of water clarity. Tiny solids suspended in the



water column can increase turbidity levels. After a significant storm event, "brown water" runoff from the land can raise turbidity levels in coastal waters. "Brown water" or <u>storm water runoff</u> can contain pollutants and contaminants, including sewage, harmful micro-organisms and chemicals from residential, commercial and recreational sources.

Turbidity matters, and knowing where the "brown water" is headed, can help ocean users make more informed decisions. This is the aim of the new PacIOOS model. Available at www.pacioos.org under Water Quality, the PacIOOS Ala Wai Turbidity Plume Model makes water quality data relevant and available to the general public in the form of a map animation. Using near real-time data of river runoff and turbidity for the Ala Wai Canal in a Regional Ocean Modeling System (ROMS) forecast, the map shows the possible path of "brown water" events leaving the Ala Wai Canal.



Turbidity is a measure of water clarity.

"The PacIOOS Ala Wai Turbidity Plume Model can help those who recreate in the Ala Moana and Waikīkī areas make more informed decisions about when and where they choose to enter the water, especially after significant rainfall," Oceanography Professor Margaret McManus explains. "But please remember, the plume position and turbidity values are predictions and—like a weather forecast—contain uncertainties."



Provided by University of Hawaii at Manoa

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