EPA P3 Project Meeting October 26, 2007

Team Members Present:

Travis Idol, Carol Ferguson, Derek Chow, Kaori Caraway, Devin Takara, Vera Oliveira, Alyssa Cho.

Guests: Carl Santa (Army Corps of Engineers) and Michele Harman (NREM grad student)

Drainage Basin Delineation

Kaori has produced a map with 5-m elevation contours. Devin has a DEM. Devin and Ed are trying to get a better estimate of the drainage area. If the area can be sufficiently delineated, we should have enough information to begin estimating flow paths and flow rates.

Water Quantity and Quality Sampling

Devin, Ed, and Vera met with Dr. DeCarlo's grad students to discuss water sampling and quality testing. Vera has begun training on water quality testing. Vernelle will join them for sampling, lab testing, and data summary. Dr. DeCarlo's lab will help the students determine physical properties, and concentrations of solids, nutrients, and metals. He recommended the students talk to Dr. Qing Li about testing for chlordane and dieldrin. These tests will have to be done at an external lab. Testing for biological oxygen demand (BOD) can be done in NREM labs. Carol mentioned that the State Dept of Health has ambient water quality standards for rainy and dry season flow. Vera has the information on the standards.

UH Stormwater Permit

Devin obtained a copy of the UH-Manoa stormwater permit. A pdf copy is available <u>here</u>. It is a very general permit that gives UH-Manoa a lot of latitude in stormwater discharge. Derek Chow will follow up to see if he can find anything more specific.

Plant Selection

Alyssa is gathering information on native wetland plants. Travis will meet with her on Monday to discuss major issues. These include: water-holding capacity of the constructed wetland substrate, water tolerances and needs of selected plants, and what to do during dry periods when not enough water will be available to support the plants. One option is to choose plants that are accustomed to dying back during dry periods and resprouting during wet periods. Drs. Charly Kinoshita and Traci Sylva have experience with bioremediation and will be consulted about plant selection, especially with respect to their ability to sequester nutrients and heavy metals.

Educational Outreach

Dr. Travis Idol has installed the weather station at mauka campus. He will be meeting with one of the Noelani School 3rd grade teachers to set up the remote communication base station. If all goes well, they will be collecting weather data weekly and sending it via email to him. Kaori will be responsible for data summary and analysis. Dr. Idol also mentioned that he will be making a presentation of the weather station and data collection to the 3rd grade students sometime before Thanksgiving. P3 team members will be invited to join him.

Community Outreach

Dr. Idol made a presentation at the Manoa Eco-Fair, sponsored by Malama O Manoa, which was part of the national "Make a Difference Day" on Saturday, October 20. Thanks to all the students who contributed pictures and data, especially Vera. The community is excited about the project and wants to see it implemented.

Next Meeting

Teams should meet on their own to accomplish specific tasks. The full P3 group will meet again at 3:00 on Friday, November 09 in Sherman 103. Dr. Idol will not be traveling that day, so he will not be present at the meeting.