



NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

An Authority of the State of Hawaii attached to the Department of Business, Economic Development & Tourism

MEMORANDUM

TO: All NELHA Clients

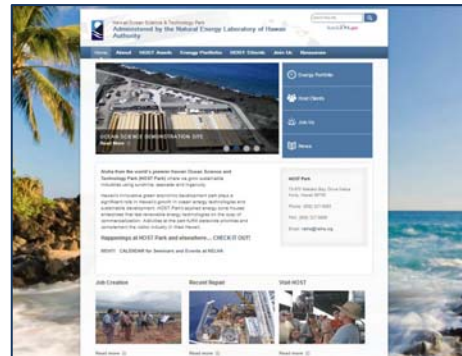
FROM: Gregory P. Barbour, NELHA Executive Director

DATE: December 31, 2013

RE: Recent Developments

Aloha to all NELHA Clients! I am writing to provide an update to you regarding recent developments at HOST Park. Briefly:

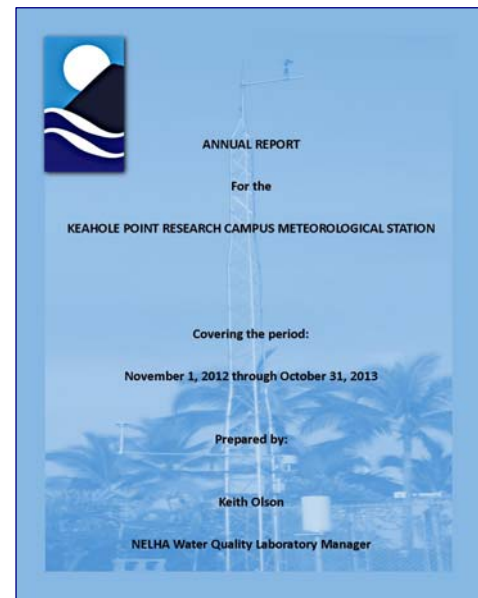
- **New NELHA Website:** For those of you who may have not visited our website recently, we completely overhauled it several months ago. I encourage you to take the time to view the changes. Laurence Sombardier did a great job on updating the site. The site can still be accessed at www.nelha.org.



- **Meteorological Annual Report Released:** We just completed a summary of data from the Met station that was installed on November 1, 2012. A couple of interesting points in the report are the annual rainfall and solar irradiance.

We all know it is a desert here at Keahole Point but I was surprised to learn that we had less than 5.5 inches of rain for the year. Of that, almost a third was in January: the wettest month.

Also, as part of the National Renewable Energy Laboratory (NREL) network it is very easy to compare Keahole Point to other NREL weather stations around the US. Our total yearly global horizontal irradiance totaled 2135 kW-hr/m² this year. It is important to note that Keahole Point receives as much total yearly global



horizontal irradiance as the desert southwestern United States. More specifically, there was virtually no difference in terms of solar irradiance received between Keahole Point and Tucson (-1.8 days). Interestingly, we received more than two full weeks more in solar irradiance (+14.2 days) as compared with Las Vegas. Temperature has a significant impact on solar panel efficiency and given that average temperatures are much lower here than the desert southwest, solar panels are much more efficient at HOST Park.

This report was prepared by Keith Olson and has much more information for those with outside demonstration projects dependent upon weather conditions. The report can be accessed at www.nelha.org/resources/library.

- **New Hires:** I am very happy to report that we have recently hired two new members to our team at NELHA. They may be familiar faces to some of you as they both have a history here at HOST Park.

Dr. Alex Leonard will join our team as the new Administrative and Projects Coordinator. Alex will work on new initiatives and some of the almost \$20 million in new infrastructure projects at NELHA that we will be completing over the next several years. Alex is currently the General Manager of Nan Construction's Big Island Operations in Kona and was formerly with Aquasearch. Alex will begin on January 21, 2014.

We have also hired Dean Towle as the new Operations Supervisor. Dean was recently with Keahole Solar Power and had a strong background in operations and maintenance of a large systems and SCADA controls. Dean will start on January 2, 2014.

- **New Security Firm:** JAN-GUARD Hawaii Inc. has been selected as the new security firm. They will begin services on January 3, 2014 at 12:00 midnight. JAN-GUARD may be familiar to some as they are very active in the West Hawaii area providing 24 hour security at Waikoloa Resort and the Queens Marketplace. We look forward to working with them in 2014 and thank Global Protective Services for their professionalism and outstanding work over the past several years.



Emergency contact telephone number for JAN-GUARD is 808-557-7170

Happy New Year from all of us at NELHA and have a great 2014 and be safe! gb