



# Winter 2015

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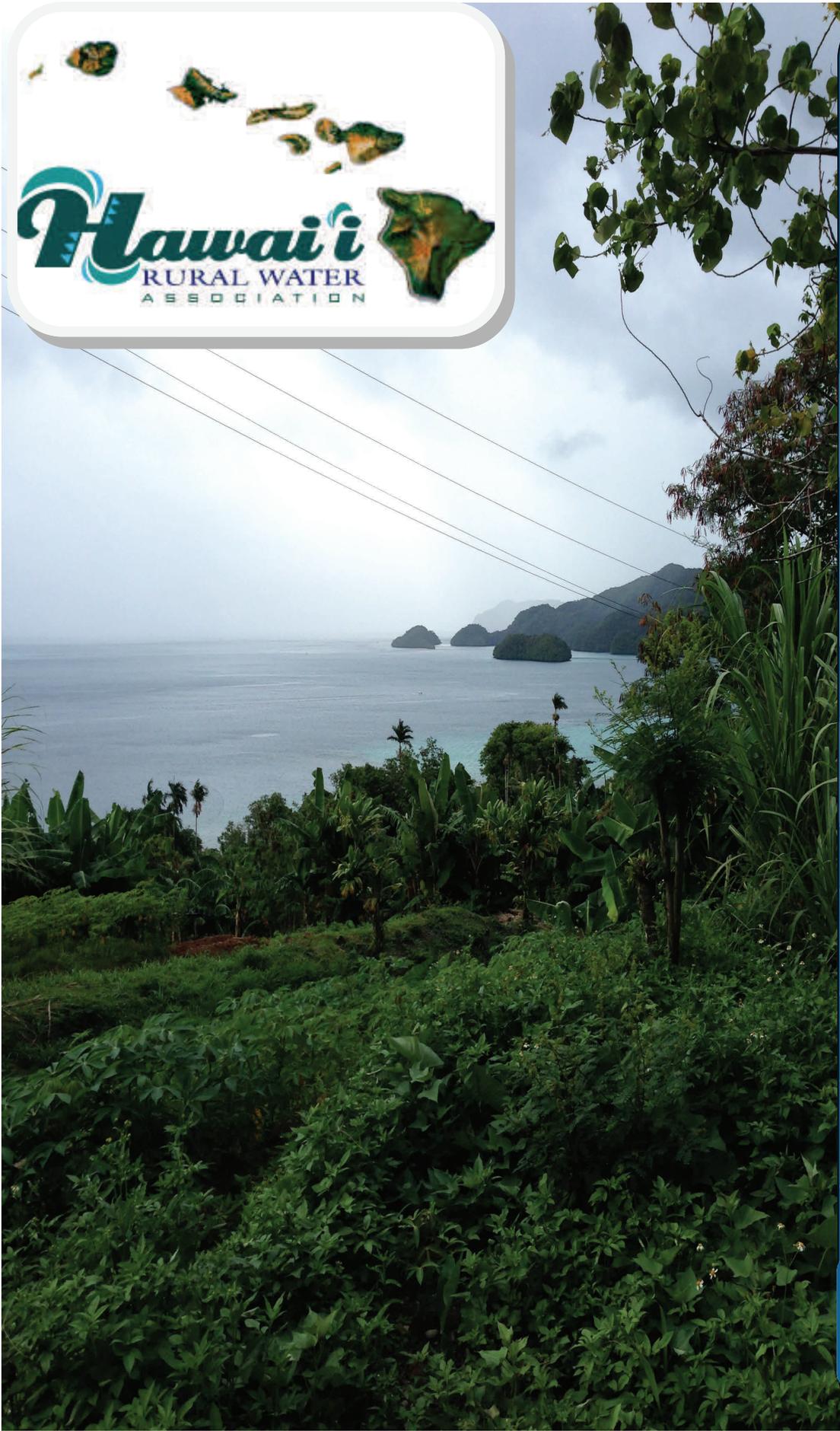
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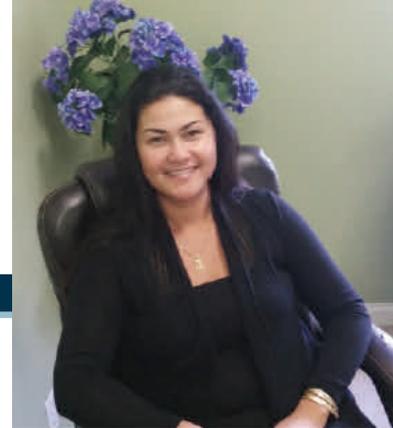
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## Message from our Executive Director

Mahana Gomes



Aloha mai kakou!

I hope that you all had a wonderful summer and fall season! Winter brings many things for us in the world of water and wastewater. As we enter into the season, I'd like to extend my appreciation to all of you for all that you do. In our line of work, we are all faced with the hard reality of "out of sight, out of mind". The value of running water when one turns a faucet on is often taken for granted, inclusive with that all the work behind it. We at the Hawai'i Rural Water Association have been blessed to work, learn and grow, side by side with all of you this past year.

We have witnessed many a milestone such as many of our fellow operators successfully passing into their next License Grade, to assisting water systems after a disaster that only had running water for an hour a day expanded to 4 hours a day. Even greater than this, we have witnessed a pride and accountability which keeps all of our families and rural communities sustainable and to much extent comfortable. We are fortunate to be a part of a busy and dedicated network of individuals. Hawai'i Rural Water Association also acknowledges other core components to this network, such as our environment and our elements. Rain is a key element to what we do and our ability to continue providing quality water at the tap. For this, we also look forward to and give thanks to the rains that come with this winter season.

As we move ahead into 2016, we at the Hawai'i Rural Water Association wish you the happiest of holidays. May you find peace and rest during this time of year!!



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## HRWA Staff and Offerings

HRWA welcomes Greg DeVito (Circuit Rider), Curtis Duff (Wastewater Circuit Rider), and Travis Hysell (Source Water Specialist) to our team bringing a varied background and years of experience. Please contact our office should you need assistance.

Please contact us at [hrwaoffice@hawaiiirwa.org](mailto:hrwaoffice@hawaiiirwa.org) for information on our 2016 CEU course scheduled, to schedule an onsite class or to be added to our mailing list.

We will be offering classes again in March.

HRWA would like to extend the opportunity for you to partner with us and become a member. If you are interested please contact our office by e-mail at [hrwaoffice@hawaiiirwa.org](mailto:hrwaoffice@hawaiiirwa.org). We can provide you with information regarding our application and member benefits.

### Where is your SWAP Report?



Erin VanderZee

For more information on developing a plan, contact HRWA.

As a Source Water Specialist, one of the first questions I ask systems during a technical visit is, “Do you have a copy of your Source Water Assessment Program (SWAP) Report?” My what? Originally completed and submitted in what seems like black and white television times, the report has been sitting on the shelf next to the well drilling logs, old receipt books and sampling data – collecting dust and forgotten. But this is not where it belongs! Unlike old data, your SWAP Report should become a part of a living and ever-changing documentation of your water system’s environment, called a Source Water Protection Plan (SWPP). A good plan should be updated every time a change is noticed in the source protection zones, delineated by the SWAP report. For systems whose sources are located in an urban environment where there are many potential contaminating activities (PCAs), the groundwater vulnerability is in constant flux. Industries move in and out of capture zones, property ownership exchanges, and public education and notification often gets left by the wayside. Instead, property owner contacts should be maintained, and best management practices (BMPs) should be dispersed to those in the capture zones. PCAs should be logged and prioritized whenever they are added or removed from your system’s delineated areas. For systems who are in remote areas, explore your source protection areas by land or air and be certain nothing has been anonymously dumped or developed. Also, maintain communication with local land authority on handling issues such as accidental spills, fire protocol, or other emergency activity located around your source. Document any action you take in favor of source protection and include it in a record keeping section of your plan. Most important, a SWPP should be readily available. Its production creates awareness to the cycle of land use and groundwater quality. By knowing what has happened over time to the land that feeds your drinking water, management strategies can be more accurate and effective, dealing directly with the contamination’s source. As we gear up for completing 2015’s Consumer Confidence Reports (CCRs), take notice and compare years past. Are your Nitrates up? Is there a steady trend in Volatile Organic Contaminants (VOCs) detection? These detections could be from manageable sources when identified and inventoried correctly. The result: Better tasting water with lower effects on health and an assurance that future water quality is to be preserved. So go dig up your Source Water Assessment Report! Dust it off and bring it into the present by updating it into a Source Water Protection Plan.

## Circuit Rider in Saipan



On August 2, 2015, Typhoon Soudelor passed directly over Saipan (island in the Northern Marianas). Soudelor hit Saipan as a Category 2 storm, causing widespread damage on the island. The National Weather Service's anemometer at Saipan Int'l Airport broke after recording a gust of 91 mph. Much of the island was left without water and power as well as passable roads. The island's power plant and electrical infrastructure were damaged. Early estimates say that Soudelor caused over \$20M USD in damages on Saipan.



On August 6th, US President Obama declared the Northern Mariana Islands a federal disaster area. Mr. Jason Zufelt contacted the head of the Water Division for the Saipan CUC to assist in recovery and restoration efforts and went out to Saipan on August 18<sup>th</sup> to be of assistance in restoring water there.



When Mr. Zufelt arrived in Saipan, the CUC was providing water to part of Saipan for approximately an hour per day. Mr. Zufelt provided training to 1) properly charge and flush air from a water system, 2) how to create 3-phase power from a single-phase generator and 3) use pressure gauges for leak detection. When Mr. Zufelt left Saipan, the entire island was receiving water for at least 4 hours/day with the hospital receiving water 24 hours a day.



Having comprehensive security measures in place is critical to the long term success and well-being of your water and wastewater system. With all possible contingencies accounted for, a “Blanket of Security” is created which offers a level of comfort in the knowledge that should unwanted events occur, your system (you) has taken the necessary precautions.

Security begins with a plan to protect the public, wastewater staff, and plant assets in the event of natural disasters, communication and power interruptions, vandalism, and computer cyber attacks. These types of improvements help prevent or detect intruders, problems, and emergencies. Security improvements include the installation of security equipment, administrative procedural changes, and planning activities.

**A Vulnerability Assessment (VA) is a good place to start** - planning document used to identify security measures appropriate for wastewater system—and can include:

- ⇒ Creates an inventory of wastewater treatment system and critical components
- ⇒ Considers the effect of threats to the wastewater treatment/collection system
- ⇒ Assesses the wastewater system’s vulnerabilities
- ⇒ Identifies existing security measures
- ⇒ Selects specific security measures to be implemented
- ⇒ Considers the financial ability of the utility to pay for security measures
- ⇒ Prioritizes the implementation of selected security measures

**Physical wastewater security measures can include the following:**

- ⇒ Barriers, fencing and gates
- ⇒ Security lighting
- ⇒ Re-keying doors and locks
- ⇒ Motion detectors, alarms or cameras
- ⇒ Smoke and chemical detection systems
- ⇒ Emergency back-up generators
- ⇒ Locking manhole covers in critical areas
- ⇒ Secured lift stations
- ⇒ Personal safety equipment
- ⇒ Computer firewalls

## **Security measures can be administrative procedures or planning activities such as:**

- ⇒ Evaluating SCADA systems for cyber attack vulnerability
- ⇒ Protecting computer access
- ⇒ Securing the storage and backup of key records and data
- ⇒ Using incident reporting logs or forms
- ⇒ Developing a chain of custody procedure for chemical deliveries
- ⇒ Performing background checks on employees

### **Preparing an Emergency Response Plan**

An “Emergency Response Plan” (ERP) is a comprehensive document that accounts for actions that occur before, during, and after an emergency. The goal of an ERP is to prevent, minimize, and mitigate injury and damage resulting from natural or man-made emergencies or disasters. An updated ERP is an important security measure. Federal regulations require coordination with local emergency planning committees established under the Emergency Planning and Community Right-to-Know Act when preparing or revising an ERP. Core elements of the ERP guidance include:

- ⇒ System specific information
- ⇒ Roles and responsibilities
- ⇒ Communication procedures
- ⇒ Personnel safety
- ⇒ Emergency storage
- ⇒ Contaminated wastewater disposal
- ⇒ Biosolids
- ⇒ Equipment
- ⇒ Chemical supplies
- ⇒ Property protection
- ⇒ Response capabilities
- ⇒ Sampling
- ⇒ Monitoring



HRWA can work with your system to create both a VA and an ERP. These services are free of charge to your public utility, so please contact our office if you require assistance. Be safe and I'll see you in the field.



*Water has no substitute...*

*Conserve it!*



**At the Kauai Fire tent, students learned how water helps in fire safety and protection.**

The DOW would like to thank the following supporters of the 12<sup>th</sup> Annual Make a Splash with Project WET festival: Department of Education; Department of Health – Safe Drinking Water Branch; Department of Land and Natural Resources – Division of Forestry and Wildlife; UH College of Tropical Agriculture and Human Resources (UH-CTAHR) Kauai Agricultural Research Center; Kauai Fire Department; Kauai Police Department; Mayor Bernard Carvalho Jr.; City and County of Honolulu – Storm Water Quality Branch; East Kauai & West Kauai Soil and Water Conservation Districts; Kukui-ula Development Company; Grove Farm Company Inc.; Aqua Engineers Inc.; Hawaii Rural Water Association; Kapaa High School JROTC; Kauai Board of Water Supply; and DOW staff, retirees and family.

## Make a Splash

### DOW's Make a Splash festival gathers over 730 students

LIHUE – Over 730 students attended the Department of Water's (DOW) 12<sup>th</sup> Annual Make a Splash with Project WET (Water Education for Teachers) Festival, Thursday, at the Pua Loke Arboretum.

“We are pleased to offer this educational opportunity to Kauai's fifth graders year after year. It's something our staff, community, and schools look forward to every September,” said Kirk Saiki, DOW's manager and chief engineer. “We could not do something like this without the support of our schools, community, volunteers, county and state departments, Board of Water and DOW staff.”

Every year, the DOW invites fifth grade students from around the island to attend the Make a Splash festival. The event gathers parents, students, teachers, government resource agencies, organizations and enthusiasts of all kinds for a common cause: to educate students about water, our most precious resource.

At the festival, students participate in dynamic hands-on activities, games and educational exhibits and learn how this critical natural resource affects water-dependent activities like agriculture, recreation, the local industry and wildlife habitats. Students leave the event with a better perspective on how they can contribute to water's wise use and protection.

Kauai is currently the only island that organizes this water education festival. However, the DOW has been granted funds from the State Department of Health-Safe Drinking Water Branch to implement the Project WET curriculum in other counties throughout Hawaii.

“We've held eight Project WET training workshops throughout the islands during the past two years,” said Kim Tamaoka, DOW's public relations specialist who manages Kauai's Project WET program. “We've also conducted Make a Splash mini-festivals in Hilo this past year. We hope to continue our efforts to inspire other county water departments to coordinate the Make a Splash festival for their island, because we've seen the lasting impact it has made in our community and in our keiki.”

For more information about the Make a Splash with Project WET Festival, please call Kim Tamaoka at 245-5455.

## Announcements

**Save-the-date:** The first annual HRWA annual conference will be held on November 2-4, 2016 on Maui. Stay tuned for more information on registration, our vendor EXPO and operator rodeo.



### CONSUMER CONFIDENCE REPORTS

The July 1 deadline is quickly approaching. Has your system prepared a CCR?

CCRs are required by to be completed by July 1, 2016 containing January – December 2015 Data

Call the Hawaii Rural Water Association today to set up assistance in completing a CCR.

Failure to submit a copy of the CCR and certification to the SDWB is a violation of the CCR rule.

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65-1241 Pomaikai Place, Suite 2 <http://www.hawaiiirwa.org/>  
Kamuela, HI 96743 <http://www.hrwa.net/>  
808.315.8925 Note our new address and number

**CCR DEADLINE – JULY 1, 2016**



The next WaterPro, National Rural Water Association (NRWA's) annual conference, will be held on September 12-14, 2016 in Orlando, Florida.



## NRWA Revolving Loan Fund

The NRWA Revolving Loan Fund (RLF) was established under a grant from United States Department of Agriculture / Rural Utility Service (USDA RUS) to provide financing to eligible utilities for pre-development costs associated with proposed water and wastewater projects. RLF funds can also be used with existing water/wastewater systems and the short term costs incurred for replacement equipment, small scale extension of services or other small capital projects that are not a part of your regular operations and maintenance.



Systems applying must be public entities. This includes municipalities, counties, special purpose districts, Native American Tribes and corporations not operated for profit, including cooperatives, with up to 10,000 population and rural areas with no population limits.

### What are the loan amounts?

Loan amounts may not exceed \$100,000 or 75% of the total project cost whichever is less. Applicants will be given credit for documented project cost prior to receiving the RLF loan.

### What are the loan terms?

The law authorizing the program allows a maximum repayment period of 10 years. Additional ranking points are awarded in the selection process for applicants that propose a quicker repayment of the loan. The repayment period cannot exceed the useful life of the facilities or financed item.

5 year, interest only, pre-development loans will also be available.

### What is the interest rate?

Loans will be made at the lower of the poverty or market interest rate as published by USDA RUS, with a minimum of 3% at the time of closing. The most current rates are available on the USDA RUS Water and Environmental Programs Home page at [www.usda.gov/rus/water](http://www.usda.gov/rus/water).

Please contact us if you are interested.



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## Associate Members

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Kili LLC is a Native Hawaiian Organization (NHO) owned 8(a) company (*dba Kuku AE*). Its majority share, nonprofit owner, Native Hawaiian Legal Defense & Education Fund (NHLDEF), was founded in 2005, and is dedicated to improving the lives of Native Hawaiians by advocating and promoting their civil rights through legal/political efforts, education and community economic development.

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## Associate Members

HRWA would like to extend our appreciation to all our members. Your membership assists HRWA in being a resource to water and wastewater systems throughout the State of Hawai'i as well as the Southern and Western Pacific.

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**What month in the traditional Hawaiian Calendar are we within?**

Answer: Makali'i followed by Ka'elo

**What is the name of this Hawaiian Season?**

Answer: Ho'oilō

**On average, how much Methane Gas is produced in an Anaerobic Digester per capita (per person) per day?**

Answer: 1 Cubic Foot

**Who invented the "ballcock" in mid-1800, a device still used in today's flush toilet?**

Answer: Thomas Crapper

**Water is a shared resource that we all depend on. What can you, as an individual and as a member of an organization do to protect our source waters?**

Answer: There are many things that you can do!

Use and dispose of harmful materials properly.

- Motor oil
- Pesticides/Herbicides
- Paints/Varnishes
- Household cleaners
- Medicines

Don't overuse pesticides or fertilizers. Many fertilizers and pesticides contain hazardous chemicals. These can travel through the soil and contaminate ground water. If you feel you must use these chemicals, please remember to use them in moderation.