

# THE WATER SPOT

HAWAII STATE DEPARTMENT OF HEALTH • SAFE DRINKING WATER BRANCH

## SAMPLE COLLECTION & RESERVATION SYSTEM GOES LIVE

Beginning October 1, 2013, the SDWB's Sample Collection and Reservation System (SCRS) will go live. SCRS is a new on-line system for water systems to view monitoring requirements, schedule water samples with the State Laboratory, print out Chain-of-Custody forms, receive e-mail notifications pertaining to samples, review sample results, access the Safe Drinking Water Information System (SDWIS) Viewer application, download sampling instructions and other SDWB resources. All water systems should have received training from SDWB staff.

If you have not received training or need further assistance, please contact SDWB staff as follows:

- ◆ Hawaii Island systems – Ms. Theresa McGeehan-Takiue (808) 933-0407
- ◆ Maui Island systems – Mr. Steven Matsuda (808) 586-4258 or direct toll free from Maui 984-2400, ext. 64258
- ◆ Molokai and Lanai Island systems – Mr. Melvin Tokuda (808) 586-4258 or direct toll free from Molokai and Lanai (800) 468-4644, ext. 64258
- ◆ Oahu Island systems – Ms. Jennifer Nikaido or Ms. Ann Zane (808) 586-4258
- ◆ Kauai Island systems – Mr. David Kawahara (808) 586-4258 or direct toll free from Kauai 274-3141, ext. 64258

The website can be accessed at <http://eha-web.doh.hawaii.gov/scrs>. Upon your first log-in, please update your e-mail address and phone number in your user profile.

A user guide is available in the Instructions / Resources section of SCRS and is also available on the SharePoint website at <http://dohcolab.doh.hawaii.gov/sites/ftpsdwb3/default.aspx>.

If you have questions on Monitoring Requirements, please contact the following persons:

<i>Regulatory Requirement</i>	<i>Contact Name</i>	<i>Contact Email Address</i>
<i>Phase II/V Monitoring (DOH Lab)</i>	<i>David Kawahara Steven Matsuda Melvin Tokuda</i>	<i>david.kawahara@doh.hawaii.gov steven.matsuda@doh.hawaii.gov melvin.tokuda@doh.hawaii.gov</i>
<i>Phase II/V Rule (external labs)</i>	<i>Kumar Bhagavan</i>	<i>kumar.bhagavan@doh.hawaii.gov</i>
<i>Lead &amp; Copper Rule</i>	<i>Jennifer Nikaido</i>	<i>jennifer.nikaido@doh.hawaii.gov</i>
<i>Total Coliform Rule</i>	<i>Ann Zane</i>	<i>ann.zane@doh.hawaii.gov</i>
<i>Stage 2 Disinfectants &amp; Disinfection</i>	<i>Craig Watanabe</i>	<i>craig.k.watanabe@doh.hawaii.gov</i>
<i>Surface Water Treatment Rule</i>	<i>Craig Watanabe</i>	<i>craig.k.watanabe@doh.hawaii.gov</i>
<i>Ground Water Rule</i>	<i>Michael Miyahira</i>	<i>michael.miyahira@doh.hawaii.gov</i>
<i>Radionuclides Rule</i>	<i>Melvin Hamano</i>	<i>melvin.hamano@doh.hawaii.gov</i>

**VOLUME 17, ISSUE 4**

**OCTOBER 2013**

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## LOW PASSING RATES FOR EXAMS

On July 22-24, both the Water Treatment Plant Operator (WTPO) and Distribution System Operator (DSO) examinations were held at five locations across the state: Maui, Oahu, Kona, Hilo, and Kauai. Both overall passing rates were very low. For the WTPO exam, only five out of fifteen passed establishing an overall pass rate of 33%. The overall DSO exam pass rate was even lower at 30% with only three out of ten operators passing the exam.

Exam	Passed	Examinees	Passing Rate
WTPO	5	15	33%
DSO	3	10	30%

Congratulations to those who passed the exam! For those who would like to re-take the exam, please review your Individual Mastery Report which provides information on the areas you need to improve upon. Reference books are available to borrow from the Operator Library to help you study. You should also review the new Formula/Conversion Table dated August 7, 2012 which will replace the version which has been used up until now. See details below.

If you would like to re-take the DSO exam in October, there are seats still available. Please contact Jodi Yamami at 808 586-4263 to reserve your seat. The next WTPO exam however, will not be held until January 2014. Please submit the WTPO Exam Registration Form and fee by October 28, 2013.

### OPERATORS WANTED

*The following organization has indicated a need for certified operators. Please contact them directly for more information.*

**DSO 1-2 or WTPO 1-2      Maui      Pural Water Specialty Co., Inc**  
**Contact Laurie Matsunami, [laurie.matsunami@puralwater.com](mailto:laurie.matsunami@puralwater.com)**

### EXAM UPDATE

Starting with the October 2013 Distribution System Operator (DSO) examination, the new Formula/Conversion Table dated August 7, 2012 will be utilized. This table, which is provided for use during an exam, was recently revised with the addition of pie wheels for various equations. The new table may be found on the Association of Boards of Certification (ABC) website: [www.abccert.org/testing\\_services/formulas\\_conversion\\_tables.asp](http://www.abccert.org/testing_services/formulas_conversion_tables.asp)

If you are preparing for an exam, please take the time to review the new table. A copy will be provided with any exam notification letter sent to those who have registered for a DSO or Water Treatment Plant Operator (WTPO) exam.

## DSO & WTPO RENEWALS DUE

*Expiring in 2013?*  
*Submit your renewal form & payment by*  
**11/15/2013**

Contact: Jodi Yamami

Phone: 808 586-4263

Fax: 808 586-4351

Email: [jodi.yamami@doh.hawaii.gov](mailto:jodi.yamami@doh.hawaii.gov)

<http://health.hawaii.gov/sdwb/operatorcert/>

## DWSRF ANNUAL REPORT

The Safe Drinking Water Branch (SDWB) is pleased to provide this annual report on the activities of our Drinking Water State Revolving Fund (DWSRF) for the State Fiscal Year 2013 (July 1, 2012 - June 30, 2013). The DWSRF is a federally-capitalized loan program that provides low interest loans to the four County water departments for their drinking water infrastructure projects. Since 1997, the Hawaii DWSRF has financed over \$143,000,000 in County water supply projects, such as treatment plants, new drinking water sources, the replacement of

aging waterlines, and storage tanks. The resulting public health benefits and water and energy savings for over 1 million rate paying residents Statewide, coupled with the favorable debt service opportunity for the County entity (interest rates vary between 1% and 2% depending on the project loan amount), is a win-win for all parties. In addition, the DWSRF continues to provide additional subsidization (zero percent interest + principal forgiveness), to a portion of these already low interest loans to qualifying “Green” projects that provide water

or energy efficiency benefits, thus reducing the effective interest rate to even lower levels!

The Hawaii DWSRF program is considering extending financing to state-owned and privately-owned water systems in the near future.

Table 1 lists all of the County projects that executed loan agreements last fiscal year. A heartfelt “mahalo” to all of our County water supply managers and their hardworking staff for embracing this important program!

SEE DWSRF ANNUAL REPORT, PAGE 4

COUNTY	WATER SYSTEM	PROJECT NAME	LOAN AMOUNT (million \$)	INTEREST RATE (%)	ADDITIONAL SUBSIDIZATION (million \$)
Kauai	Lihue-Kapaa	Job No. PLH-03, Kahili Horizontal Directional Drilled Well	2.00	2.0%	1.0
	Wailua (old #413)	Job No. 02-15, WK28, Wailua Houselots Main Replacement, Phase I	4.67	1.5%	0.75
Honolulu	Honolulu-Windward-Pearl Harbor	Kealakaha Dr., Pooholua Dr., and Waipao Pl. 8-in Mains Kona Street 8-Inch Main	1.18	2.0%	
	Honolulu-Windward-Pearl Harbor	Kona Street 8-Inch Main	4.40	1.5%	
	Honolulu-Windward-Pearl Harbor	Ward Avenue 12-Inch and 8-Inch Water Mains	2.10	2.0%	
Maui	Makawao	Kaupakalua Road Waterline Improvements, Phase I	0.85	2.0%	
	Upper Kula	Waikamoi Flume Repair/ Replacement	8.36	1.0%	
	Hana	Wakiu Well Replacement	0.40	1.5%	
Big Island	Pepeekeo	Kulaimano Production Well and Supporting Facilities	1.34	2.0%	
	North Kohala	Kynnersley #1 - 0.3 MG Reservoir Replacement	2.39	2.0%	1.0

Table 1. County Projects in State Fiscal Year 2013

## DWSRF ANNUAL REPORT

CONTINUED FROM PAGE 3

Figure 1 summarizes the historical use of the loan program per County from 1996-2013.

Source: *Drinking Water Treatment Revolving Loan Fund (DWTRLF) Annual Reports.*

Figure 2 summarizes the projected future demand for the loan program per County based on the Project Priority List, an annually-updated, running total of projects proposed by each County for DWSRF eligibility and funding. Source: *SFY2014 Drinking Water Treatment Revolving Loan Fund Intended Use Plan for SFY2014 (FFY2013 appropriation).* Link: <http://health.hawaii.gov/sdwb/files/2013/08/SFY-2014-IUP.pdf>.

For more information on the DWSRF program, contact Mr. Alain Carey of the SDWB Engineering Section or check out our website at: <http://health.hawaii.gov/sdwb/dwsrf/>.

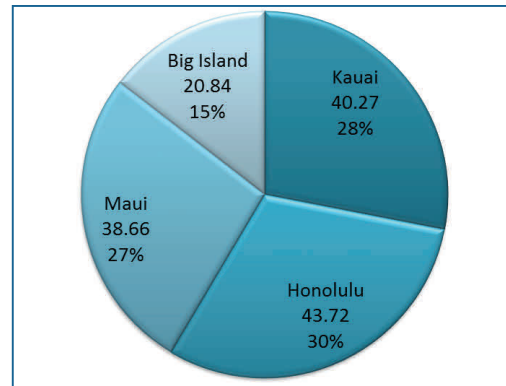


Figure 1. Executed Loans from 1996-2013 in millions

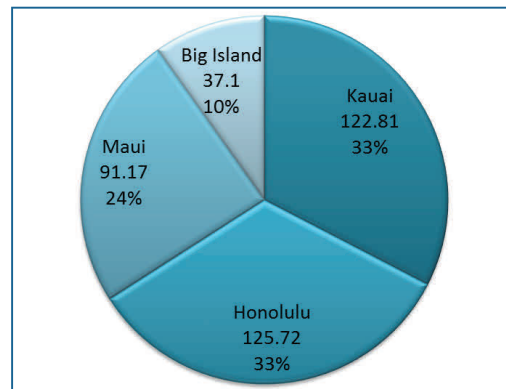


Figure 2. Priority Projects Future Demand in millions

## REACTIVATION OF INACTIVE DRINKING WATER SOURCES

Understandably, drinking water sources will be inactivated from time-to-time due to emergencies, natural disasters or replacement of a pump or motor. The sources can be out-of-service for a considerable length of time and may produce a different water quality when the well is reactivated. Due to this potential for changing water quality over time and in the interest of ensuring public health protection, the SDWB is requiring water systems to provide water quality results taken within the last five (5) years of the proposed reactivation date for all contaminants on the “Contaminants to be Tested Prior to Reactivating Sources of Drinking Water” list. The source shall not be reactivated until the SDWB has reviewed the water quality results. The water quality results may include the last compliance monitoring results taken at the entry-point-to-distribution system or at the

wellhead, or special sampling at the wellhead prior to any treatment. In addition, the water system shall take a microbiological sample at the wellhead prior to any treatment, including chlorination. A chlorine residual reading shall be taken at the same time as the microbiological sample and shall be non-detect or the microbiological sample will be considered invalid.

Finally, the SDWB reserves the right to require additional testing for specific contaminants due to potential contaminating activities near the source or due to past history of contamination of the source or nearby sources.

The “Contaminants to be Tested Prior to Reactivating Sources of Drinking Water” can be found on the SDWB website at <http://health.hawaii.gov/sdwb/>.

**2013 HWWA  
Annual Conference  
Balancing Water Demand  
& Land Use**

October 23-25, 2013  
Makena Beach & Golf Resort

**CEU Training Program  
for  
Water System Operators**

See next page for Course Listing

**HRWA**  
808-495-0264



hrwaoffice@hawaiiirwa.org

**ABPA, HAWAII CHAPTER  
PRESENTS  
2013 CONFERENCE &  
CERTIFICATION EXAMS**



**Wednesday, November 13, 2013**

*Informational Seminar*, Pacific Beach Hotel, Honolulu  
For registration, contact Gary Kong (808) 679-2179 or Bill Wong (808) 226-9556.

**Thursday, November 14, 2013**

*ABPA Backflow Prevention Assembly Tester Proctor Training Session & Hands-On Tester Review for Recertification*, Pacific Pipe Company, Pearl City  
Program requirements and applications may be downloaded at [www.abpa.org](http://www.abpa.org).  
For tester hands-on practice session, contact Jay Nakashima (808) 298-3171.

**Friday, November 15, 2013**

*ABPA Backflow Prevention Assembly Tester Certification / Recertification Examination*  
*ABPA Cross Connection Control Specialist Certification Examination*  
Eligibility requirements and applications may be downloaded at [www.abpa.org/tester.htm](http://www.abpa.org/tester.htm).  
For program information, contact ABPA (877) 227-2127.

**ENVIRONMENTAL FINANCE CENTER NETWORK**

The Environmental Finance Center Network (EFCN) held workshops during the week of July 29, 2013 on Maui and the Big Island on Managerial/Financial Leadership, Asset Management, Water Loss,

Energy Management and Rates & Finance. If you were unable to attend the training, you can still take advantage of one-on-one assistance through e-mails and phone calls on any of these topics and more. In addition, there

are several budgeting, rate and asset management tools on the EFCN website: [www.efcnetwork.org](http://www.efcnetwork.org). Use these tools as-is or use them as ideas for creating your own spreadsheets, budgets, or plans.

SDWB's URL has changed. Update your bookmark at:

<http://health.hawaii.gov/sdwb/>



# Hawai'i Rural Water Association



## Continuing Education Training Program for Water System Operators Course Listing October 9, 2013 through December 31, 2013

Course	CEU's	Date & Time 8:30am to 3:30pm (1 hr. lunch break)	Location	Tuition Fee		
				Public Water System Employee	HRWA Member (non-water system employee)	Non-member
<del>Regulatory Compliance Monitoring</del>	<del>0.6</del>	<del>10/9/2013</del>	<del>Oahu</del>	<del>\$125</del>	<del>\$210</del>	<del>\$490</del>
Cross Connection Control Program Overview	0.6	11/6/2013	Hilo	\$125	\$210	\$490
How to Write an Emergency Response Plan	0.6	11/7/2013	Kona	\$125	\$210	\$490
How to Write an Emergency Response Plan	0.6	11/13/2013	Oahu	\$125	\$210	\$490
How to Write an Emergency Response Plan	0.6	11/14/2013	Maui	\$125	\$210	\$490
Chlorine Safety and Handling	0.6	12/3/2013	Kauai	\$125	\$210	\$490
Basic Equations for Pipes and Flows	0.6	12/10/2013	Maui	\$125	\$210	\$490
Chlorine Safety and Handling	0.6	12/12/2013	Molokai	\$125	\$210	\$490

### REGISTRATION FORM

**Registration forms must be received two weeks in advance of class scheduled date.**

Name \_\_\_\_\_ Public Water System (PWS) \_\_\_\_\_

Public Water System (PWS) # \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ County \_\_\_\_\_

Telephone \_\_\_\_\_ Position \_\_\_\_\_

E-mail \_\_\_\_\_ Certification # \_\_\_\_\_

Session/Date/Location \_\_\_\_\_ Class Fee \$ \_\_\_\_\_

Email registration to: [hrwaoffice@hawaiiirwa.org](mailto:hrwaoffice@hawaiiirwa.org)

Mail registration and payment to: Hawai'i Rural Water Association, 1325 S. Kihei Rd., Suite 200, Kihei, HI 96753

Payment by Visa and MasterCard: contact our office @ 808-495-0264 or [hrwaoffice@hawaiiirwa.org](mailto:hrwaoffice@hawaiiirwa.org) for further information.

Note: This program is partially funded by the United States Environmental Protection Agency and the State of Hawaii, Department of Health using Federal Drinking Water State Revolving Fund monies.

**Participants must attend entire class to qualify for Hawai'i Water Operator Board of Certification approved CEUs!! HRWA does not guarantee the attendee CEUs, but only offers CEUs that have been approved by the Hawai'i Water Operators Board of Certification.**



1325 South Kihei Road, Suite 200  
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# Hawai'i Rural Water Association



## Continuing Education Training Program for Water System Operators

### Course Listing - Page 2

October 9, 2013 through December 31, 2013

### Topic Descriptions

**Regulatory Compliance Monitoring:** This course will provide an overview of regulations for drinking water systems including but not limited to, the Safe Drinking Water Act, Consumer Confidence Reports, overview of Chemical Monitoring (Arsenic, Lead & Copper, Phase II/V, Disinfection By-Products, Radionuclides, etc.), overview of Bacteriological Monitoring (Total Coliform Rule, Ground Water Rule, Surface Water Treatment Rule), Public Notification Rule, Sanitary Surveys, and Violations.

**How to Write an Emergency Response Plan:** This course is designed to educate the attendees about the process, roles and responsibilities, tasks, and key components needed in order to create an Emergency Response Plan. A hands-on activity will allow attendees to practice creating an actual plan.

**Basic Equations for Pipes and Flows:** This course is designed to educate the attendees on how to calculate for pipe thrust blocks, pipe flows and capacities, including but not limited to volume, velocity and pressure. A hands on practice equation sheet will be administered to allow and ensure the attendee retained the formulas and equations covered.

**Chlorine Safety and Handling:** This course is designed to familiarize individuals with the safe handling and use of chlorine.

**Cross-Connection Control Program Overview:** This course is designed to familiarize individuals on the ABC's (Authority, Backflow Assemblies, Certifications, Documentation, Education) of a Cross-Connection Control Program.

### Tuition Costs Per Class Per Year

This CEU Training Program for Water System Operators will be subsidized by the DOH, Safe Drinking Water Branch for 3 years and is designed to be self-sustaining on tuition fees after the 3 year period. This means that tuition fees will increase each year.

Program Year	You Pay	Program pays on your behalf
One	\$ 60.00	\$ 180.00
Two	\$ 125.00	\$ 125.00
Three	\$ 195.00	\$ 65.00
Four	\$ 270.00	\$ -



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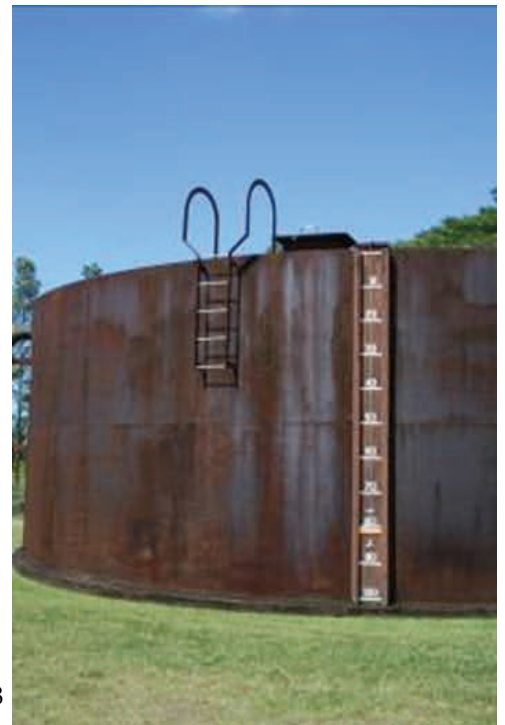
## HSCA TAKES THE FIRST STEP TO UPGRADE

The Hawaiian Shores Community Association (HSCA) is located in the Puna District of the Big Island. HSCA was established in 1981 to take over the assets of the subdivision after the developer, Pan Am, declared bankruptcy. Most of the water infrastructure was constructed in the early 1970's and was built with materials that would not meet today's water standards. HSCA has 1,294 small residential lots that range in size from 9,000 – 15,000 square feet with about 450 lots currently developed with homes receiving water from the water system they own and operate. Their potable water system has one well which is estimated to deliver approximately 500 gpm, a 100,000 gallon Corten steel tank which is in need of replacement, a hydropneumatic tank, chlorine disinfection, and approximately 15 miles of distribution pipeline.

Eileen O'Hara, the Board President of HSCA said, "Our water system is living on borrowed time, although it is still functioning thanks to constant attention by our maintenance crew. We anticipate that replacement and upgrades to the water system will cost over \$1 million. To be able to do the work in a timely manner would require a sizable special assessment which would be a serious hardship on members, many of whom are elderly on fixed incomes as well as many low income families." HSCA is planning on applying for funding through the USDA Rural Utility Services (USDA RUS) program which has low interest loans and grants available for this type of improvements. Eileen O'Hara notes, "The first step in the application process is to complete the Preliminary Engineering Report (PER) so we can cost out the repairs and improvements needed to maintain and upgrade our water system."

HSCA learned about a Predevelopment Planning Grant opportunity with the USDA RUS to help pay for engineering work through Rural Community Assistance Corporation (RCAC). The Predevelopment Planning Grant, awarded in June of this year, will help the homeowner's association pay for the preliminary work to develop an application for water system repair and upgrades. Chris Kanazawa, the State Director for the USDA said, "Every community deserves the access to safe, high quality drinking water and through Rural Development's Water and Environmental Programs, we can play a key role in achieving this. The Predevelopment Planning Grant will ensure that the Hawaiian Shores Community Association will have the financial and technical assistance to complete a quality application for their water system project."

HSCA has contracted with Engineering Partners, Inc. to complete a preliminary engineering report and environmental report, and they are currently about 75% through the preliminary engineering design work. The USDA provides assistance to communities that might be interested in this funding program through both RCAC and Hawaii Rural Water Association. For more information about USDA's Water and Environmental Programs, contact Timothy W. O'Connell, Acting Community Programs Director at 808-933-8313 or via e-mail at [tim.oconnell@hi.usda.gov](mailto:tim.oconnell@hi.usda.gov).



HSCA's Corten steel tank in need of replacement.



# QUARTERLY CALENDAR

- ◆ **10/1 Operations & Emergency Plan Due**  
*Surface Water Systems*
- ◆ **10/10 CT Report Due**  
*Surface Water Systems*
- ◆ **10/10 MRDL Report Due**  
*Disinfection Systems*
- ◆ **10/10 TCR Report Due**  
*Systems who complete their own tests*
- ◆ **10/10 Enhanced Coagulation Report Due**  
*Conventional Treatment Systems*
- ◆ **10/10 Chemical Quarterly Monitoring Report Due**  
*Systems with quarterly monitoring requirements*
- ◆ **10/21-23 DSO Exam**  
*Maui, Kona, Oahu, Hilo & Kauai*
- ◆ **10/23-25 HWWA Conference**  
*Makena Beach & Golf Resort, Maui*
- ◆ **10/28 WTPO Applications Due**  
*January 2014 Examinees*
- ◆ **11/12 CT Report Due**  
*Surface Water Systems*
- ◆ **11/12 TCR Report Due**  
*Systems who complete their own tests*
- ◆ **11/15 DSO & WTPO Renewals Due**  
*Selected Operators*
- ◆ **11/26 Board of Certification Meeting**  
*SDWB Honolulu, 10:00 am*
- ◆ **12/10 CT Report Due**  
*Surface Water Systems*
- ◆ **12/10 TCR Report Due**  
*Systems who complete their own tests*

## OCTOBER 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 O&E Plan Due	2	3	4	5
6	7	8	9	10 CT Report Due MRDL Report Due TCR Report Due Enhanced Coagulation Report Due Chemical Quarterly Monitoring Report Due	11	12
13	14	15	16	17	18	19
20	21 Maui & Kona DSO Exam	22 Oahu & Hilo DSO Exam	23 Kauai DSO Exam HWWA Conference	24 HWWA Conference	25 HWWA Conference	26
27	28 WTPO Applications Due	29	30	31		

## NOVEMBER 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11 HOLIDAY	12 CT Report Due TCR Report Due	13	14	15 DSO & WTPO Renewals Due	16
17	18	19	20	21	22	23
24	25	26 Board of Certification Meeting	27	28 HOLIDAY	29	30

## DECEMBER 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10 CT Report Due TCR Report Due	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25 HOLIDAY	26	27	28
29	30	31				



**HAWAII STATE  
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SAFE DRINKING WATER  
BRANCH**

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**NEIL ABERCROMBIE**

Governor of Hawaii

**LORETTA J. FUDDY,  
A.C.S.W., M.P.H.**

Director of Health  
*Promoting Lifelong Health & Wellness*

**GARY GILL**

Deputy Director for Environmental Health

*The mission of the Safe Drinking Water Branch of the Department of Health is to safeguard public health by protecting Hawaii's drinking water sources (surface water and groundwater) from contamination and assure that owners and operators of public water systems provide safe drinking water to the community. This mission is accomplished through the administration of the Safe Drinking Water Program, Underground Injection Control Program (UIC), Groundwater Protection Program (GWPP), and the Drinking Water State Revolving Fund (DWSRF).*

**We're on the Web!**

<http://health.hawaii.gov/sdwb/>

*We provide access to our activities without regard to race, color, national origin (including language), age, sex, religion, or disability. Write or call our Affirmative Action Officer at Box 3378, Honolulu, HI 96801-3378 or at 808 586-4616 (voice) within 180 days of a problem.*

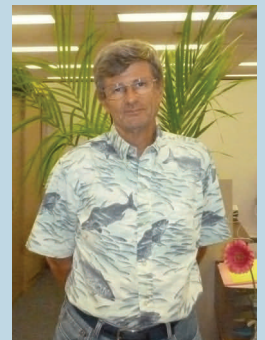
**BOB WHITTIER JOINS SDWB**

Bob Whittier recently joined the SDWB on June 17 as an Environmental Health Specialist. Prior to this, he worked as a Hydrogeologist at the University of Hawaii, Water Resources Research Center, and the Department of Geology and Geophysics since 2002. Bob's major projects there included the Source Water Assessment Program (SWAP), the environmental and health risks posed by On-Site Sewage Disposal Systems, and the Lahaina Groundwater Tracer Study, all of which were sponsored by the SDWB so he is already familiar with the work of the branch.

Bob has extensive experience in groundwater modeling and a thorough understanding of groundwater flow and transport dynamics which will bring valued

expertise to his current projects: the Groundwater Protection Plan and continuing the drinking water susceptibility to contamination assessments for the SWAP. He is also slated to work on the upcoming groundwater project which includes sampling programs that directly measure the impact of on-site sewage disposal systems on the groundwater and assessments of the groundwater quality risk posed by the use of reclaimed wastewater for irrigation.

Welcome to the SDWB, Bob!



Bob Whittier