# THE WATER SPOT 2007

PROGRAM INFORMATION FROM THE HAWAI'I SAFE DRINKING WATER BRANCH OF THE HAWAI'I STATE DEPARTMENT OF HEALTH

Volume 11, Issue 4 July/August 2007 Phone: (808) 586-4258 FAX No: (808) 586-4351

# 2007 HAWAII WATER WORKS ASSOCIATION (HWWA) ANNUAL CONFERENCE

2007 HAWAII WATER WORKS ASSOCIATION (HWWA) ANNUAL CONFERENCE October 3-5, 2007 at the Sheraton Waikiki Hotel, Honolulu, Hawaii Sponsored by: Honolulu Board of Water Supply and Hawaii State Department of Health \*\*\*NOTE: You can earn up to 1.0 CEUs by attending this Conference.\*\*\*

## **TENTATIVE PROGRAM**

Wednesday, Octob	ber 3, 2007 (Kauai Ballroom)
8:00 - 9:00 AM	REGISTRATION/CONTINENTAL BREAKFAST
9:15 - 9:30 AM	OPENING SESSION - Jonathan Suzuki, Conference Chair INVOCATION - Arthur Aiu WELCOME - Clifford Lum, Manager and Chief Engineer, BWS
9:30 - 10:00 AM	21st Century Ahupua`a - Mayor Mufi Hannemann
10:00 - 10:40 AM	Looking to Hawaii's Past to Sustain Hawaii's Future - Ramsay Taum, Director of Oahu Operations, Hawaii Nature Center
10:40 - 10:50 AM	BREAK
10:50 - 11:30 AM	Assessing Water Resources Now and Into the Future - Gordon Tribble, Director, USGS Pacific Islands Water Science Center
11:30 - 12:45 PM	LUNCH BUFFET
1:00 - 1:45 PM	Becoming a Professional Human Being: Using the Mind-Body Health Connection to Access the Power Within - Jimmy Bagnola, International Speaker, Executive Coach and Corporate Educator
1:45 - 2:30 PM	The Land and Water Relationship: The Importance of Land Use Management and Control on Source Water Quality - Dr. Chi Ho Sham, Senior Scientist, The Cadmus Group, Inc.
2:30 - 2:45 PM	BREAK
2:45 - 3:30 PM	Wai and Its Relationship to Hawaiians in the Past, Present and Future - William Aila, President, Mohala I Ka Wai and Eric Enos, Executive Director, Kaala Farms
3:30 - 4:30 PM	A Watershed Based Approach to Resource Management: Oahu's Watershed Management Plans - Barry Usegawa, Water Resources Principal Executive, BWS
4:30 PM	ANNOUNCEMENTS/ADJOURNMENT
5:30 - 8:30 PM	MEET & GREET - Sheraton Waikiki, Niihau Room (Cocktails and Heavy Pupus)
8:30 - midnight	HOSPITALITY ROOM

Thursday, October	er 4, 2007 (Honolulu Suite)			
8:00 - 9:00 AM	BREAKFAST BUFFET			
8:25 AM	ANNOUNCEMENTS - Jonathan Suzuki, Conference Chair			
8:35 - 9:10 AM	The Utility's Role in Water Loss Control - Cat Sawai, Civil Engineer IV, Internal Conservation Program, BWS			
9:10 - 9:55 AM	Sustainable Building Blocks - Developing a Water Conserving Oahu - Lisa Maddaus, Principal Engineer, Brown & Caldwell and Jenny Gain, Civil Engineer III, Brown & Caldwell			
9:55 - 10:10 AM	BREAK			
10:10 - 10:50 AM	<b>Social Marketing - Not Just Talking, But Actually Getting Heard -</b> Dennis Christianson, President and Creative Director and Kathleen M. Pahinui, Senior Account Supervisor, Laird Christianson Advertising			
10:50 - 11:30 AM	Energy Efficiency for Water Utilities - HECO			
11:30 - 12:45 PM	LUNCH BREAK - Box Lunch			
1:00 - 1:45 PM	Breakout Session 1 (Honolulu Suite) Changing Work Practices in Field Operations, The Rollout of the Multi-Skilled Worker Pilot, Daryl Hiromoto, Field Operations, BWS	Breakout Session 2 (Kohala/Kona Suites) Source Water Protection Applications-Regulatory & Non-Regulatory - Dr. Chi Ho Sham, Senior Scientist, Cadmus Group, Inc.		
1:45 - 2:30 PM	How Field Work Gets Done With a New Computer Maintenance Management System (CMMS) Brian McKee, Chief Information Technology Officer, BWS	From Assessment to Protection - Daniel Chang, Environmental Health Specialist, DOH and Dr.Chi Ho Sham, Senior Scientist, Cadmus Group, Inc.		
2:30 - 2:45 PM	BREAK			
2:45 - 3:30 PM	Concurrent Session 1 (continued) Water Supply and Recycling Research Dr. Roger Babcock, Associate Professor, Civil & Environmental Engineering, UH	Concurrent Session 2 (continued)  SWP Tools - Dr. Chi Ho Sham, Senior Scientist, Cadmus Group Inc.		
3:30 - 4:30 PM	Emerging Issues in Drinking Water Regulation, Stuart Yamada and Mike Miyahira, Safe Drinking Water Branch, DOH	<b>Funding Options</b> Daniel Chang, Environmental Health Specialist, DOH and Dr. Chi Ho Sham, Senior Scientist, Cadmus Group, Inc.		
4:30 PM 6:00 PM 4:30 - 6:00 PM 9:00 - midnight	ANNOUNCEMENTS/ADJOURNMENT CONFERENCE BANQUET, Sheraton Waikiki, Honolulu Suite HOSPITALITY ROOM			
Friday, October 5	5, 2007 (Honolulu Suite)			
8:15 - 9:15 AM 8:30	CONTINENTAL BREAKFAST ANNOUNCEMENTS, Jonathan Suzuki, Conference Chair			
8:45 - 9:30 AM	Hawaii's Watershed Partnerships: A Model for Water Resource Management Collaboration, Christine Ogura, Planner, Watershed Partnerships Program, DLNR-DOFAW			
9:30 - 10:30 AM	Malama Learning Center - Planting Seeds for Sustainability Education in West Oahu, Pauline Sato, Board Member and Treasurer of Malama Learning Center			
10:15 - 10:30 AM 11:15 AM 12:30 PM	CLOSING and OMIYAGE FIELD TRIP - H-3 Tunnel/Halawa Xeri FIELD TRIP - Hickam Golf Tournamer			

#### **REGISTRATION FORM**

2007 HAWAII WATER WORKS ASSOCIATION OCTOBER 3-5, 2007 SHERATON WAIKIKI, HONOLULU, HAWAII



Name:		Phone:	
	Last First		
E-mail:		Fax No	).:
Firm/Organiza	ation:		
Address:			
Indicate here	if you have special needs:		
Please mark o		or late - Thank you! ed by August 10, 2007 faxed by August 31, 2007 ed after September 1, 2007xx	_ = \$ _ = \$
MEAL CHA	efunds will be made for cancellations aft	ES:	
Wednesday (	10/3): Meet & Greet	x <u>\$40.00</u>	=\$
Thusday (10	/4): Evening Banquet	x\$60.00	
FIELD TRIP Option Option		x   \$10.00   x   \$80.00	_ =\$ =\$ =====================
Special group All reservation will be subjecthree (3) days  Yes, I	odation: Your reservation at <a href="http://www.starwoodm">http://www.starwoodm</a> room rates are: \$170.00 Run of House or \$ ns must be received by the hotel no later that to the best rate available (not necessarily after the meeting dates, subject to availabile plan to stay at Sheraton Waikiki Hotel plan to stay at a different hotel	neeting.com/Book/scchwwa 190.00 Run of Ocean. an September 2, 2007. Reservat group rate). Room rates will be of lity of guest rooms at the time of	ions received after <b>September 2, 2007</b> Iffered by Hotel three (3) days prior and reservation.
Mala Charl	manuful to HWWA Conference 2007		
Make Check Mail to:	Payable to: HWWA Conference 2007 HWWA Conference ATTN: Lorna Heller	-	ached forms if you are participating in ld trip and return payment with

If you need additional information, please call Lorna Heller at (808) 550-5043.

c/o Honolulu Board of Water Supply

630 South Beretania Street Honolulu, HI 96843

Email: <a href="mailto:lheller@hbws.org">lheller@hbws.org</a>

registration. THANK YOU!

#### APRIL DSO PASSING RATE INCREASES!

<u>Exam results</u>. The 1st 2007 Distribution System Operator (DSO) certification exams were held in Hilo, Kona, Wailuku, and Honolulu in late April. Sixty-five operators sat for the exam, and 33 passed for a passing rate of 51%. The breakdown by grade is as follows:

Grade	Passed	# of Examinees	Passing Rate, %	Passing Rate - Oct 06, %	Grades 1, 2, and 4 operators
1	26	39	67	62	improved their passing rates over October 2006 results!
2	6	16	38	30	
3	0	2	0	0	Congratulations to those who
4	1	8	13	0	passed and those who took the time to study.
total	33	65	51	46	, in the second

The UH Outreach College and the DOH provided math refresher training in Hilo, Kona, Wailuku, and Honolulu. Operators who attended the training greatly increased their chances of passing the exam.

	Pass	No Pass	76% of the operators who took the math
Attended Math refresher	28 (43%)	9 (14%)	refresher passed the exam.
Did not attend	5 (8%)	23 (35%)	82% of the operators who did not take the math refresher failed the exam.
Total	33 (51%)	32 (49%)	

2007 exam dates. Please make note of upcoming exam dates and deadlines:

Certification exam	Exam Date	Applications due
Water Treatment Plant Operator (WTPO)	7/24/07	4/24/07
DSO	10/23/07	7/23/07
WTPO	1/22/08	10/22/07

<u>CEU approval</u>. If your DSO or WTPO certification expires on 11/30/07, you were mailed a renewal reminder in March, along with a listing of your CEUs recorded to date. If you need to have other CEUs *approved* and recorded, please fill out the Course Approval form (purple) and send it in as soon as possible. Please submit your request at least <u>one month</u> before the board meeting. The next board meeting is scheduled for 8/28/07.

If you need to *take* courses for CEUs, you can refer to the Approved CEUs sheet for ideas. The UH Outreach College will again offer courses this summer. New options available to earn CEUs are the Montana Operator Basics CD course (1.1 CEU-10s for the Ground Water course, and 1.3 CEU-10s for the Surface Water course [you may take one course only]), a new calendar of Hawaii Wastewater Operator Training Center courses (July 2007 through June 2008), and the Hawaii Water Works Association Conference in October. As always, other options are: AWWA workshops, correspondence courses through California State University at Sacramento (CSUS), and online courses through CSUS and AWWA.

<u>Application for certification</u>. You can download copies of the DSO (or WTPO) Certification Application form, Exam Registration form, or CEU Request form from the DOH SDWB website at:

http://www.hawaii.gov/health/environmental/water/sdwb/index.html.

You can also call Kumar Bhagavan or Ann Zane at 586-4258 for copies of these forms.

Based on Chapter 11-20, Rules Relating to Potable Water Systems, effective November 28, 2005 and Code of Federal Regulations Title 40, Part 1 41 of July 1, 2006, the Ph ase I and Phase II R ule effective January 1, 1993, and the Phase V Rule effective January 17, 1994)

## **MICROBIOLOGICAL**

**Total Coliform** 

Fecal Coliform (MF/MPN) or E. Coli

### WATER QUALITY PARAMETERS

Alkalinity Calcium

Conductivity

pH (field measurement)

Temperature (field measurement)

Turbidity

## **INORGANIC CHEMICALS**

Antimony
Arsenic
Asbestos\*
Barium
Beryllium
Cadmium
Chromium
Copper
Cyanide
Fluoride

Nickel Nitrate (as nitrogen) Nitrite (as nitrogen)

Selenium Thallium

Lead Mercury

## **ORGANIC CHEMICALS**

#### **Volatile Organic Chemicals**

Benzene

Carbon Tetrachloride

Chlorobenzene
o-Dichlorobenzene
p-Dichlorobenzene
1,2-Dichloroethane
1,1-Dichloroethylene
cis-1,2-Dichloroethylene
trans-1,2-Dichloroethylene

Dichloromethane

1,2-Dichloropropane (DCP)

Ethylbenzene Styrene

## **Volatile Organic Chemicals (cont.)**

Tetrachloroethylene

Toluene

1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,2,4-Trichlorobenzene Trichloroethylene Vinyl Chloride

Xylenes (total)

## **Synthetic Organic Chemicals**

2,4-D Alachlor Aldicarb

Aldicarb Sulfone Aldicarb Sulfoxide

Atrazine

Benzo(a)Pyrene Carbofuran Chlordane Dalapon

Dibromochloropropane (DBCP)

Di(2-ethylhexyl)adipate Di(2-ethylhexyl)phthalate

Dinoseb Diquat

Dioxin (2,3,7,8-TCDD)

Endothall Endrin

Ethylene Dibromide (EDB)

Glyphosate Heptachlor

Heptachlor epoxide Hexachlorobenzene

Hexachlorocyclopentadiene

Lindane Methoxychlor Oxamyl (Vydate) Pentachlorophenol

Picloram

Polychlorinated biphenyls (PCBs)

2,4,5-TP (Silvex)

Simazine Toxaphene

1,2,3-Trichloropropane (TCP)

<sup>\*</sup> Note that asbestos is a new contaminant that must be tested for as of May 10, 2007. All "contaminants" testing done prior to this date does not have to test for asbestos.

#### **NOTES:**

- (1) With the exception of turbidity and water quality parameters, all analyses must be performed by a laboratory certified or approved by the Hawaii Department of Health, State Laboratories Division. However, turbidity and water quality parameters must be done using EPA approved methods.
- (2) Please consult with the Safe Drinking Water Branch for acceptable laboratories to perform Microscopic Particulate Analysis.
- (3) All laboratory reports must be submitted to allow the Department of Health to verify that the analyses were performed by an approved laboratory, using EPA approved methods for drinking water analysis. The EPA method and detection levels must be clearly stated for each chemical contaminant tested.
- (4) The Director of Health may require additional analyses whenever appropriate to evaluate the new source.

# SURFACE WATER AND GROUNDWATER UNDER THE DIRECT INFLUENCE OF SURFACE WATER (GWUDI) SOURCES ONLY:

The following additional water quality parameters may be required by the State at its discretion:

- Microscopic Particulate Analysis (MPA) using Consensus Method for Determining Groundwaters Under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA), EPA 910/9 29-029 EPA (October 1992)
- MPA analyses shall be accompanied by a particle sizing analysis (down to 2 um) with the tabular results segregated by size in bins reflective of Cryptosporidium and Giardia sized particles, as well as those particles smaller and larger in size, e.g. <2 um, 2-5 um, 5-15 um, 15-30 um, 30-50 um, 50-100 um, >100 um.
- Total Suspended Solids (TSS)
- Color (True and Apparent)
- Total Organic Carbon (TOC)
- Dissolved Organic Carbon (DOC) fraction
- Total Trihalomethane Formation Potential (TTHM FP)
- Five Haloacetic Acid Formation Potential (HAA5 FP)

The State reserves the right to require pilot testing of all alternative filtration technologies, applicable under HAR 11-20-46(c)(2)(D), on all surface water or GWUDI sources proposed for use in a regulated public water system. Water quality parameters not listed here may be added to the pilot testing protocol at State discretion.

#### RESULTS OF 2007 AWWA-Hawaii Section CONFERENCE - TOP OPS CONTEST

On May 25, 2007 at the 2007 Annual AWWA Hawaii Section Conference, the first Top Ops Contest was held to test the knowledge of water system operators. This year's contest pitted the following three teams: (1) Navy-Marine; (2) Aqua Engineers; and (3) Pural Water in an informative, competitive, and fun-filled battle.

Judges for the contest were Bill Wong, Ivan Nakatsuka, and Mark Chun.

This year's winning team was the Navy-Marine Team of Mike Fitzgerald, Nancy Hargreaves, and Tom Murin.

Congratulations to the winners and all those who participated and made this a fun and successful contest.

Special thanks to Earl Ichimura of Pural Water for organizing the contest and we hope to see more teams next year.

#### **NEW SDWB STAFF**

On July 11, 2007, Jennifer Nikaido joined the Safe Drinking Water Branch, Engineering Section as an Engineer IV. Ms. Nikaido comes to the SDWB after working in California as a civil engineer in both private and public sectors. Jennifer will be working on primarily Drinking Water State Revolving Fund activities, but will also assist the Engineering Section staff with sanitary surveys, the review of construction plans and engineering reports, and other regulatory compliance activities. The SDWB staff welcomes Jennifer to the Branch!

#### SDWB STAFF

The Safe Drinking Water Branch has made significant changes since the SDWB Staff lising was last updated in "The Waterspot" newsletter. Here is a current listing of SDWB staff with their primary responsibilities:

Stuart Yamada Branch Chief

Doug Nguyen Data Processing System Analyst, SDWIS

VACANT Operator Certification

**CLERICAL** 

Gail Masaki Clerical
Seila Aroni Clerical
Claire Brown Clerical
Amy Higa Clerical
Shirley Mariano Clerical
Norma Polendy Clerical

**COMPLIANCE** 

Ann Zane Compliance Supervisor

Mel Hamano (General - Administration, Budget/Grants)

Kumar Bhagavan Consumer Confidence Reports, Phase II/Phase V monitoring, Monitoring Waivers (dev.)

**ENGINEERING** 

Mike Miyahira Engineering Supervisor

Jennifer Nikaido DWSRF (Started July 11, 2007)

VACANT New Source Review/Approval, Cross-Connection, Groundwater Rule Donald Yasutake Lead & Copper, Capacity Development, Circuit Rider Program

VACANT Surface Water Treatment Rule, Disinfectant/Disinfection By-Product Rule

#### **GROUNDWATER POLLUTION CONTROL (GWPC) SECTION**

Chauncey Hew Supervisor

Jaime Rimando Underground Injection Control Norris Uehara Underground Injection Control

**MONITORING** 

Daniel Chang Monitoring Supervisor, Newsletter, Quality Assurance, Source Water Assessment/Protection

David Kawahara Monitoring, Chemical sample scheduling Bruce Koike Monitoring, BACTI scheduling (Oahu)

Steven Matsuda Monitoring, Special Projects

John Topliss Monitoring (**Retiring at the end-of-August 2007**)

VACANT Groundwater Protection/Monitoring (To be moved from GWPC Section)

**NEIGHBOR ISLAND STAFF** 

Jude Schwarze SDWB - Kauai

Gordon Muraoka SDWB - Maui (includes Molokai)

Paul Okuna SDWB - West Hawaii Theresa McGeehan-Takiue SDWB - East Hawaii

# On the Spot:

2007 Hawaii Water Works Association Conference	1
Results of Operator Certification Examination	4
Contaminants to be Tested in All New Sources of Potable Water	4
Results of AWWA Conference -Top Ops Contest	(
Safe Drinking Water Branch Staff	7

Please send your suggestions, ideas, questions or comments to:

THE WATER SPOT 2007 Safe Drinking Water Branch State Department of Health 919 Ala Moana Blvd., Room 308 Honolulu, Hawaii 96814 Fax us at (808) 586-4351,

Attn: "THE WATER SPOT 2007"

SDWB WEB SITE:

http://www.hawaii.gov/health/environmental/water/sdwb



LINDA LINGLE Governor of Hawaii

CHIYOME LEINAALA FUKINO, M.D. Director of Health

LAURENCE K. LAU
Deputy Director for
Environmental Health

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.

The Water Spot 2007 (July/August 2007)
Safe Drinking Water Branch
Environmental Management Division
Hawai`i Department of Health
919 Ala Moana Boulevard, Room 308
Honolulu HI 96814

