



STATE OF HAWAII
DEPARTMENT OF HEALTH
KA 'OIHANA OLAKINO
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File: SDWB
Minutes 11-25-24

BOARD OF CERTIFICATION OF PUBLIC WATER SYSTEM OPERATORS
MINUTES OF THE MEETING

DATE: November 25, 2024

TIME: 10:00 a.m.

MEMBERS PRESENT: James Landgraf (1st term expires 6/30/25)
Ian Ichimura (1st term expires 6/30/28)
Zhaohui Wang (1st term expires 6/30/28)

A. Call to Order

- The meeting began at 10:00 a.m.

B. Old Business

- The Board unanimously approved the August 28, 2024 meeting minutes.

C. New Business

- DSO Certification Applications

The Board unanimously approved the following applications for certification:

	Name	Grade Requested	Grade Approved
1	Alfonso, Keenan	1	1
2	Gaspar, Matthew	1	1
3	Kalama-Baker, Travis	1	1
4	Lungay, Micah	1	1
5	Madamba, Felipe	1	1
6	Mielke-Suizu, Taylor	1	1
7	Blankenfeld-Kaheiki, George	2	2

8	Kaheiki, George	2	2
9	Kealoha-Hall, Christopher	2	2
10	Fujii, Kayne	3	3
11	Metcalf, Christopher	3	3
12	Ancheta, Garrett	4	4
13	Hendershot, Kalei	4	4
14	Smither, Sean	4	4
15	Schackmann, Allison	3 Reciprocity	2 Reciprocity 4 Regular

For detailed information on the DSO applications, please refer to Attachment 1.

- WTPO Certification Applications

The Board unanimously approved the following applications for certification:

	Name	Grade Requested	Grade Approved
1	Gago, S'mon	1	1
2	Hill, Robert	1	1
3	Morales Collazo, Edgar	1	1
4	Pulotu, Kauaiilii	1	1
5	Yamada, Jayson	1	1
6	Pantastico, Jacob	2	2
7	Gauthier, Gilles	4 Reciprocity	4 Regular
8	Geiger, Victoria	4 Reciprocity	3 Reciprocity 4 Regular

For detailed information on the WTPO applications, please refer to Attachment 2.

- CEU Requests

The Board unanimously approved the following CEU requests:

	Course	Date	Sponsor	CEUs Approved
1	Clean Water Access During Emergencies	7/10/24	US EPA	0.1
2	Can Amazon Change Rural Water? Technology for	8/29/24	NRWA	0.1

Smaller Water Utilities				
3	Wildfire Impacts on Water Infrastructure	9/11/24	US EPA	0.1
4	LCRR Compliance: Don't Forget About the Notices to LSL, GRR, and Unknown Customers	9/16/24	NRWA	0.1
5	PFAS: National Primary Drinking Water Regulation, Occurrence, Analytics, and Risk Communications	9/24/24	US EPA	0.25
6	The Role of Smart Tanks in Distribution Water Quality Management	9/25/24	NRWA	0.1
7	Faster Decision-Making with Digital Twins	10/17/24	AWWA	0.1
8	2024 HWWA Conference	10/23-25/24	HWWA	27 sessions at 0.05 ea
9	PFAS: Rule Implementation and Treatment	10/29/24	US EPA	0.25
10	Preparing for Round 2 of AWIA	10/31/24	US EPA	0.15
11	Tackle PFAS in Minutes	11/5/24	AWWA	0.1
12	2024 HRWA Conference	11/19-21/24	HRWA	2 additional sessions at 0.075 ea
13	Lead Reduction Updates and Lead Service Line Identification and Replacement	12/3/24	US EPA	0.25
14	2025 Pacific Water Pre-Conference (Water Operators)	2/4/25	AWWA Hi/HWEA	0.4
15	2025 Pacific Water Conference	2/4-6/25	AWWA Hi/HWEA	79 sessions at 0.05 ea
16	Hazardous Material Handling, Emergency Response, & Hazardous Waste Management, SPCC, Discharge	Various	California Water Service	0.2

Management				
17	Systems for Handling, Feeding, and Delivering Bulk Solids in Small and Large Bags	Various	Cleanwater1	0.1
18	High-Density Lime Systems – Operation and Design Considerations	Various	Cleanwater1	0.1
19	Community Responder Essentials	Various	AED Institute of America	0.4
20	Driver Improvement Program	Various	Department of Human Resources	0.7
21	Nuts, Bolts, & Gaskets – An Introduction	Various	CEU Plan	0.2
22	Operator Math Made Easy – Overview	Various	CEU Plan	0.1
23	Testing a Reduced Pressure Principle Backflow Prevention Device	Various	CEU Plan	0.3
24	Consumer Confidence Report and Public Notification Rules	Various	CEU Plan	0.1
25	Corrosion Control for the Management of Lead and Copper at Customer Taps	Various	AWWA eLearning	0.2
26	Customer Metering and Billing Operations for Optimized Revenue Capture	Various	AWWA eLearning	0.25
27	Effective Leakage and Pressure Management to Contain System Leakage	Various	AWWA eLearning	0.2
28	2025 Virtual Operator Conference	Various	Illinois State Water Survey & RCAP	12 sessions at 0.1 ea
29	2024 WaterPro Conference	9/9-11/24	NRWA	0.9

For detailed information on the CEU requests, please refer to Attachment 3.

- DSO Certification Exam Results

The Board was notified of the following results of the DSO certification exam administered from the last board meeting to date. Exams were administered on Oahu, Maui, Kauai, Molokai, and the Big Island. Twelve out of 24 operators passed for an overall passing rate of 50%.

	Examinee	Grade	Certification
1	Adolpho, Jarrett	1	None
2	Echallas, Roland	1	D1-565
3	Inis, Lino	1	D1-566
4	Kaiwi, Lester	1	None
5	Lehano-Boyce, Dick	1	None
6	Mancao-Kanekoa, Kayza	1	None
7	Parker, Joshua	1	D1-567
8	Rapanot, Scottie	1	None
9	Ellamar, Rory	2	D2-338
10	Gottlieb, Bonnie	2	None
11	Hadama, Kelly	2	D2-339
12	Kim, Ethan	2	None
13	Neizman, Davis	2	None
14	Hamlin, Matthew	3	None
15	Wagner, Genalyn	3	D3-171
16	Ano, James	4	D4-309
17	Bamsey, Duncan	4	D4-308
18	Carbonell, Elijah	4	D4-310
19	Harshell, Wesley	4	None
20	Hutchinson, Gary	4	D4-311
21	Inouye, Alvin	4	None
22	Silva, Arlene	4	None
23	Snyder, Jimmy	4	D4-312
24	Truong, Williams	4	D4-313

DSO Exam Results			
Grade	Passed	Examinees	Passing Rate
DSO 1	3	8	38%
DSO 2	2	5	40%
DSO 3	1	2	50%
DSO 4	6	9	67%
Total	12	24	50%

- **WTPO Certification Exam Results**

The Board was notified of the following results of the WTPO certification exam administered from the last board meeting to date. Exams were administered on Oahu, Maui, Kauai, Molokai, and the Big Island. Ten out of 21 operators passed for an overall passing rate of 48%.

	Examinee	Grade	Certification
1	Basilio, Brandon	1	T1-273
2	Bueno, Wayne	1	None
3	Fujii, Kayne	1	T1-274
4	Fukamizu, Alan	1	T1-275
5	Garcia, Flynn	1	T1-276
6	Gomes, Paul	1	None
7	Kaina, Anthony	1	None
8	Kauhane, Dean	1	T1-271
9	Kauhola, Matthew	1	None
10	Matsui, Destry	1	T1-277
11	Sanchez, Brian	1	T1-278
12	Stacy, Robert	1	T1-272
13	Young, Darcy	1	None
14	Bitancor, Romel	2	T2-253
15	Estrella, Frank	2	None
16	Matsu, Lindo	2	None
17	Oducado, Justin	2	None
18	Hannon, Patrick	4	T4-144

19	Martin, Francis	4	None
20	Onellion, Matthew	4	None
21	Paman, Daniel	4	None

WTPO Exam Results			
Grade	Passed	Examinees	Passing Rate
WTPO 1	8	13	62%
WTPO 2	1	4	25%
WTPO 3	--	--	--
WTPO 4	1	4	25%
Total	10	21	48%

D. Announcements

- The next board meeting will be scheduled on February 26, 2025.

E. Adjournment

- The meeting was adjourned at 11:00 a.m.

Respectfully Submitted,



Jodi Yamami

FOR Board of Certification of
Public Water System Operators

JY:sw

- c: Anna Yen, U.S. EPA Region IX [via yen.anna@epa.gov only]
Stephanie Hung, U.S. EPA Region IX [via hung.stephanie@epa.gov only]
James Landgraf, Board Member [via jlandgraf@hawaiiintel.net only]
Ian Ichimura, Board Member [via ian.ichimura@puralwater.com only]
Zhaohui Wang, Board Member [via zhaohui.wang@doh.hawaii.gov only]
William Whaley, Board Member [via whaleywilliam@aol.com only]

ATTACHMENT 1
DSO DECISIONS
11-25-2024

- | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| <p>1 Alfonso, Keenan Z. Grade 1
162 Waikii Ranch
Supervisor Alvin Kotaki
1 yr/2 mos</p> | <p>Maintain and check daily the tank sites, well pumps, and PRVs, check chlorine residual</p> | <p>Approve Grade 1</p> |
| <p>2 Gaspar, Matthew Grade 1
331 Honolulu-Windward-Pearl Harbor
Supervisor Bert Kawamura
3 yrs/6 mos</p> | <p>Testing source water for required residual chlorine levels to allow for adjustment at the chlorination systems, refill chlorination systems holding tank with sodium hypochlorite, small repairs to chlorination system, troubleshoot and repair/replacement parts, preventative maintenance on each unit and residual monitor</p> <ul style="list-style-type: none">• WTPO 1 certified | <p>Approve Grade 1</p> |
| <p>3 Kalama-Baker, Travis Grade 1
204 Hana Water Systems
Supervisor Duane Lammers
Equipment Operator
5 yrs</p> | <p>Meter installs, pipeline repairs, tank maintenance, equipment operations for repairs and installs of new equipment, chlorine handling, site security</p> | <p>Approve Grade 1</p> |
| <p>4 Lungay, Micah Grade 1
331 Honolulu-Windward-Pearl Harbor
Supervisor Bert Kawamura
4 yrs</p> | <p>Check residual at entry point to distribution, record residual, refill holding tanks for chlorinators, assist with repairs to chlorinators and minor repairs around the pumping stations, repair horizontal booster pumping units</p> | <p>Approve Grade 1</p> |
| <p>5 Madamba, Felipe Grade 1
144 Kilauea Military Camp
Supervisor Maleeyah Machado
Engineer
2 yrs/7 mos</p> | <p>CWRM groundwater use reporting, lead service line inventory, project management of sand filter replacement, water main replacement, tank repairs, valve replacement sampling station installation, start-up capacity report, tank rehab/replacement, well pump replacement, tank inspection</p> | <p>Approve Grade 1</p> |
| <p>6 Mielke-Suizu, Taylor V. Grade 1
428 Princeville Utilities
Supervisor Brad Suizu
Operator
4 yrs</p> | <p>Lead and copper water inventory, backflow prevention inventory, damaged meter inventory, chlorine residual testing, ArcGIS mapping, meter prep, meter change outs, meter reads, ERP plan, water quality report, flush hydrants, report to leaks, pack/ship samples</p> | <p>Approve Grade 1</p> |
| <p>7 Blankenfeld-Kaheiki, George O.K.S. Grade 2
156 Hawaiian Shores
Supervisor Tim Manning
Maintenance Worker
8 yrs</p> | <p>Assist in installing water meters and radio transmitters, read water meters, clear and maintain water lines, laterals, and valves, assist in collecting water samples, routine flush and clean water mains, fire hydrants, and monitor the water yard</p> <ul style="list-style-type: none">• DSO 1 certified | <p>Approve Grade 2</p> |

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- 8 **Kaheiki, George O. Grade 2** **Approve Grade 2**
156 Hawaiian Shores
Supervisor Tim Manning
Maintenance Worker
19 yrs
Assist in installing water meters and radio transmitters, read water meters, clear and maintain water lines, laterals, and valves, assist in collecting water samples, routine flush and clean water mains, fire hydrants, and monitor the water yard
- DSO 1 certified
 - Applicant completed 10th grade in high school and requires 2 years of experience to substitute for a high school diploma
- 9 **Kealoha-Hall, Christopher T. Grade 2** **Approve Grade 2**
156 Hawaiian Shores
Supervisor Tim Manning
Maintenance Worker
3 yrs/8 mos
Assist in installing water meters and radio transmitters, read water meters, clear and maintain water lines, laterals, and valves, assist in collecting water samples, routine flush and clean water mains, fire hydrants, and monitor the water yard
- DSO 1 certified
- 10 **Fujii, Kayne T. Grade 3** **Approve Grade 3**
101 Hilo
Supervisor Alvin Inouye
Water Plant Operator
12 yrs
Maintain daily logs and the repair of purification apparatus, monitor chlorine levels and rates and adjust as needed, change out of 150# chlorine cylinders, monitor and record keeping of all booster sites
- WTPO 1 certified
- 11 **Metcalfe, Christopher D. Grade 3** **Approve Grade 3**
400 Lihue-Kapaa
Supervisor Virgil Kapanui
Leak Investigator
2 yrs/2mos
Locate water lines and investigate leaks, provide info for crews from maps and GIS system
- City of Marietta
Supervisor Alan Croft
Foreperson
12 yrs
Maintained water system, repaired lines, located lines
- 12 **Ancheta, Garrett M. Grade 4** **Approve Grade 4**
204 Kaanapali
Supervisor Efren Ugalino
Utility Operator
4 yrs
Operate and maintain NaOCl pumping system, take chlorine residual samples, take GAC samples, collect and submit samples to DOH, install and repair meters, read meters, flush and service hydrants and mains, repair hydrants and mains, exercise and operate valves, operate booster and well pumps, investigate and address leaks, provide customer service and address concerns, general maintenance throughout distribution system
- DSO 3 and WTPO 1 certified

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- 13 **Hendershot, Kalei W. Grade 4** **Approve Grade 4**
204 Kaanapali
Supervisor Efren Ugalino
Utility Operator
5 yrs/9 mos
Completing daily checks and troubleshooting system, ensure tank levels are normal, wells operating normally and chlorine residuals are in appropriate range, adjust the rate of injection at chlorination stations if needed, conduct yearly hydrant maintenance which includes operating hydrant valves and street valves, ensure pressure is in appropriate range, leak checks, meter reading, installing meters, routine sampling
- DSO 3 and WTPO 1 certified
- 14 **Smither, Sean E. Grade 4** **Approve Grade 4**
356 Marine Corp Base Hawaii
Supervisor Robert Malaca
Work Leader
11 yrs
Water sampling, maintain pumps, water main breaks, fire hydrant flow tests, pipefitting
- DSO 1 certified
- 15 **Schackmann, Allison L. Grade 3 Reciprocity** **Approve Grade 2 Reciprocity, Approve Grade 4 Regular**
California Selma
Supervisor Stuart Skoglund
Foreman
16 yrs
Oversees new water distribution construction, assures compliance to installation specifications and verifies construction and operations are in accordance with AWWA standards, relieve operator to operate and maintain well, booster pumps, other production related equipment, regulates sources of water supply by SCADA in order to maintain distribution system storage, flow, and pressure levels
- California Water Distribution Operator Grade D3 33905 expires 3/1/2027
 - California Water Distribution Operator Grade 3 is the middle level out of 5 levels in California requiring a high school diploma, 2 years of appropriate experience, & passing of California Distribution Grade 3 exam
 - California writes their own exams
 - Recommend Grade 2 Reciprocity because of the California 2 year experience requirement which matches Hawaii Grade 2
 - Recommend Grade 4 Regular via examination since applicant has at least Hawaii Grade 4 exam requirement of 4 year

ATTACHMENT 2
WTPO DECISIONS
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| <p>1 Gago, S'mon P. Grade 1
156 Hawaiian Shores
Chlorination
Supervisor Tim Manning
Office Manager
6 yrs/10 mos</p> | <p>Clear and maintain water mains and laterals and broken water lines with disinfection before putting back into service, collect and record chlorine residuals at the water yard and lateral lines and adjust chlorine injector if necessary</p> <ul style="list-style-type: none">• DSO 2 certified | <p>Approve Grade 1</p> |
| <p>2 Hill, Robert S. Grade 1
345 Schofield
Air Stripping, Chlorination,
Fluoridation
Supervisor Kaipo Fukumoto
Water Treatment Plant Operator
1 yr/3 mos</p> | <p>Monitor air stripping towers to remove tetrachloroethylene from deep well water and add regulated amounts of chlorine and fluoride to drinking water, maintain all equipment associated with the water plant</p> | <p>Approve Grade 1</p> |
| <p>3 Morales Collazo, Edgar Grade 1
212 Wailuku
Chlorination, GAC
Supervisor Kevin Arakaki
Water Plant Maintenance Helper
1 yr</p> | <p>Install, test, repair and maintain chlorinators, GAC filters, soda ash stations, Accutab system, calibrate disinfection chlorination equipment</p> | <p>Approve Grade 1</p> |
| <p>4 Pulotu, Kauliilii T. Grade 1
163 Kaupulehu
RO
Supervisor Rory Belanio
Water Operator
1 yr</p> | <p>Collect and analyze field samples from RO skids, perform maintenance on equipment in and outside of RO facility, install membranes, perform CIPs and fill chemicals, perform draw downs and maintenance on chemical pumps</p> | <p>Approve Grade 1</p> |
| <p>5 Yamada, Jayson L.T. Grade 1
212 Wailuku
Chlorination, GAC
Supervisor Kevin Arakaki
Water Plant Maintenance Helper
1 yr</p> | <p>Install, test, repair and maintain chlorinators, GAC filters, soda ash stations, Accutab system, calibrate disinfection chlorination equipment</p> | <p>Approve Grade 1</p> |

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- 6 **Pantastico, Jacob Grade 2** **Approve Grade 2**
348 Waiawa
Membrane Filtration
Supervisor Roy Shull
Water Operator
1 yr/4 mos
- Monitor and record daily treatment plant readings such as raw/finished water, chlorine, temp, pH, turbidity, flow flux, pressures, etc., perform treatment plant start-ups and shutdowns, repair and maintenance, filter backwash, and pressure decay test when needed, troubleshoot and repair system failures on finished water effluent pumps, positive displacement Cl₂ pumps, mechanically and electrically, schedule bacT sampling, perform sampling, transport through COC, analyze readings
- WTPO 1 and DSO 4 certified
- 331 Honolulu-Windward-Pearl Harbor
Chlorination
Supervisor Frederick Lee
Water Treatment Worker
2 yrs
- Operate chlorination equipment, perform residual meter tests to determine chlorine residual, pick up orders of supplies of chemicals used, move heavy containers of chlorine gas, liquid, and tablets, place chlorine gas cylinders in service, remove when empty, prepare diluted chlorine solutions, load calcium hypochlorite tablet hopper, record daily water treatment activity and operation on chlorination worksheet report
- 7 **Gauthier Jr., Gilles Grade 4 Reciprocity** **Deny Grade 4 Reciprocity, Approve Grade 4 Regular**
City of Sorel-Tracy
Conventional Treatment
Supervisor Marco Landry
Drinking Water Plant Technician
10 yrs
- Operate and monitor computerized control systems and related equipment in water treatment and filtration plants to regulate water treatment and distribution, observe and analyze readings and indicator lights necessary for the needs of the operation, analyze test results, instrument readings and make necessary adjustments to plant equipment and systems, control and prepare chemical solutions for water treatment needs, read flow meters, level gauges and other recording devices to measure water flow and consumption levels as well as chlorine concentration, collect water samples and perform system sampling, routine laboratory testing
- Quebec OSTUD Full Treatment of Surface or Subterranean Water and Distribution Network Qualification Certificate #211665 expires 10/13/2025
 - Quebec OSTUD is the highest level out of 13 levels in Quebec requiring a combination of college study or vocational diplomas or apprentice work with passing of an exam
 - Quebec writes their own 3-hour exams
 - Recommend Grade 4 Regular via examination not reciprocity because of lack of defined years of experience requirement in Quebec rules

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8 **Geiger, Victoria Grade 4 Reciprocity**

City of Baltimore
Conventional Treatment
Supervisor Spilios Kirikos
Water Treatment Technician
7 yrs

Approve Grade 3 Reciprocity, Approve Grade 4 Regular

Monitor chlorination equipment, make raw flow adjustments, operate rapid sand filters, chemical feed adjustments for coagulation, flocculation and corrosion control, cleaning machines, collection and testing of water samples

- Maryland Water Treatment T4 License #2961 expires 8/1/2027
- Maryland Water Treatment T4 is the highest water treatment level out of 4 levels in Maryland
- Maryland Water Treatment T4 requires
 - High school diploma
 - 3 years of appropriate experience
 - Passing of a Maryland Water Treatment T4 exam
- Maryland utilizes ABC exams which are equivalent to Hawaii's exams
- Recommend Grade 3 Reciprocity because of the Maryland 3 year experience requirement which matches Hawaii Grade 3
- Recommend Grade 4 Regular via examination since applicant has at least Hawaii Grade 4 exam requirement of 4 years

ATTACHMENT 3
CEU DECISIONS
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Hawaii Courses

- 1 **Clean Water Access During Emergencies**
7/10/24 This webinar will cover response and recovery techniques following a disaster for communities to access clean water for not only drinking but also for cooking, cleaning, showering, laundry, and safe discharge to the environment using the WOW Cart Mobile Water Treatment System co-developed with US EPA
US EPA webinar
1.0 Contact Hours
0.1 CEUs
- 2 **Can Amazon Change Rural Water? Technology for Smaller Water Utilities**
8/29/24 This webinar will describe how an IT company focused on water is partnering with Amazon to provide simple solutions for small to midsize utilities using a free network called Amazon Sidewalk. This network allows for free telemetry and may be used for meter readings and remote telemetry.
NRWA webinar
1.0 Contact Hours
0.1 CEUs
- 3 **Wildfire Impacts on Water Infrastructure**
9/11/24 This webinar will discuss EPA’s emergency response efforts to the Maui wildfires and ongoing research to further understand contamination of water infrastructure.
US EPA webinar
1.0 Contact Hours
0.1 CEUs
- 4 **LCRR Compliance: Don’t Forget About the Notices to LSL, GRR, and Unknown Customers**
9/16/24 This webinar will review the LCRR regulatory requirements starting on 10/16/24 with an emphasis on customer notices, examine case studies of systems that have already sent the notices, and preview how technology can simplify sending the notices.
NRWA webinar
1.0 Contact Hours
0.1 CEUs
- 5 **PFAS: National Primary Drinking Water Regulation, Occurrence, Analytics, and Risk Communications**
9/24/24 Topics:
US EPA webinar
2.5 Contact Hours
0.25 CEUs

 - PFAS National Primary Drinking Water Regulation: Initial Monitoring Requirements and EPA-Sate Implementation Workgroup
 - EPA Drinking Water PFAS Analytical Methods and the PFAS National Primary Drinking Water Regulation
 - Implementing a Proactive PFAS Program Using “Emerging Contaminants in Small or Disadvantages Communities” Grant Funding
 - ET Broad-Spectrum PFAS Study to Characterize the Class of PFAS
- 6 **The Role of Smart Tanks in Distribution Water Quality Management**
9/25/24 This webinar will provide a practical understanding of the science and implementation of distribution system-based water treatment to address low residual levels and disinfection byproducts.
NRWA webinar
1.0 Contact Hours
0.1 CEUs
- 7 **Faster Decision-Making with Digital Twins**
10/17/24 This webinar will describe how utilities are digitalizing network operations for faster decision-making, providing operator with an interactive, real-time view of their network.
AWWA webinar
1.0 Contact Hours
0.1 CEUs

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8 **2024 HWWA Conference**
10/23-25/24
HWWA
27 sessions at 30 minutes
each for 0.05 CEUs each

30-minute drinking water sessions for full credit:

- External Funding: Opportunities, Priorities and Strategies for Success
- Environmental Investigation of Emerging Contaminants (EIEC) Project: The Honolulu Board of Water Supply's Approach to Addressing PFAS
- Performance, Degradation, and Condition Assessment of Common Water Main Materials
- Enhancing Water Utility Operations with Cartegraph Asset Management
- History of Water Service Line Pipe Material
- DWSRF Updates - Loans for Capital Improvement Projects
- Water Shortage and Conservation Planning for Maui County
- LCRR/LCRI Update
- Only Get One Tank, Need to Fix it, How Can?
- Kauai Water Use and Development Plan Update: Lessons Learned
- Development and Use of GIS and Hydraulic Modeling Tools for the County of Kauai, Department of Water
- Honolulu Board of Water Supply's Leak Detection Team
- Conceptualizing Public GAC Reactivation Facilities
- Navigating SRF Compliance Requirements for Construction Projects
- PRV Knowledge, Issues & Solutions
- Software Defined Automation
- Empowering Sustainable Water Infrastructure for Energy Cost Reduction and Enhanced Resilience
- Cyber Security 101 for Water Utilities
- Remote Utility Data
- Advantages of Polymer Concrete Over Traditional Concrete
- The Role of Automatic Self-Cleaning Filters in Sustainable Water Filtration for Industrial, Municipal, and Irrigation Applications
- Lessons Learned from Two Damaged Water Systems in Maui County
- HDOH Statewide PFAS Study
- Lead and Copper Rule Revision Compliance for the County of Kauai, Department of Water
- Kauai Water Systems Investment Plan for the County of Kauai, Department of Water
- PFAS Rule Updates: State Perspective
- On-Site Chlorine Generation: Insights from Maui County DWS

No credit for topics not related to operation and maintenance of a drinking water system or water treatment plant including funding strategies:

- Watership 2024: Another Tool to Consider for Increasing The Pool of Potential Employees
- 2024 - 2025 Hawaiian Islands Wet Season Outlook
- What Can One Water Do for You
- CWRM – Overview of the Commission on Water Resource Management

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- 9 **PFAS: Rule Implementation and Treatment**
10/29/24
US EPA webinar
2.5 Contact Hours
0.25 CEUs
- Topics:
- PFAS Treatment Requirements in New Jersey
 - PFAS National Primary Drinking Water Regulation Implementation in Kentucky
 - Decision Trees for PFAS Mitigation Selection: What to Do After PFAS Exceedances Detection
 - PFAS Breakthrough and NOM Effects from Pilot
 - EPA's Open-Source Treatment Performance Modeling Tools for PFAS Treatment
- 10 **Preparing for Round 2 of AWIA**
10/31/24
US EPA webinar
1.5 Contact Hours
0.15 CEUs
- Topics:
- Learn what is required in an RRA
 - Learn what is required in an ERP
 - Understand how to review and revise RRA and ERP
 - Learn how to use EPA's new Cybersecurity Checklist to enhance their assessment of cybersecurity in their RRA and ERP
 - Know how to certify completion of their RRA and ERP to EPA
- 11 **Tackle PFAS in Minutes**
11/5/24
AWWA webinar
1.0 Contact Hours
0.1 CEUs
- This webinar will describe the innovative capabilities of the Transcend Design Generator and its impact on PFAS removal projects focusing on water treatment, environmental compliance, and public health safety.
- 12 **2024 HRWA Conference**
11/19-21/24
HRWA
2 sessions at 45 minutes each for 0.075 CEUs each
- 45-minute drinking water sessions for full credit:
- LCRR/LCRI Update
 - What to do if Your Water System is Impacted By a Natural Disaster
- 13 **Lead Reduction Updates and Lead Service Line Identification and Replacement**
12/3/24
US EPA webinar
2.5 Contact Hours
0.25 CEUs
- Topics:
- EPA Lead Reduction in Drinking Water Updates
 - Technical Assistance Project on LSLID
 - New and Emerging Technologies for LSLID
 - LSLID Predictive Modeling Using Machine Learning Tools
 - Water Sampling for LSLID
- 14 **2025 Pacific Water Pre-Conference**
2/4/25
AWWA Hi/HWEA
EFC at CSUS
4.0 Contact Hours
0.4 CEUs
- Topics:
- Introduction to Operator Math
 - Review of Basic Math Skills
 - Units and Unit Conversions
 - Common Water Operator Calculations

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15 **2025 Pacific Water Conference**

2/4-6/24

AWWA Hi/HWEA

**79 Drinking Water Topics
with full credit @ 30
minutes each or 0.05 CEUs**

Drinking Water Topics (30 minutes full credit) include:

- Strategies for Effective Metallic Transmission Pipeline Management
- Actively Managing Leak Detection
- PRV Knowledge, Issues & Solutions
- Coal & Coconut Carbon (GAC) Arsenic Leaching Study
- New Jersey's Largest Water Utility Installs Novel Media for PFAS Removal
- The Future Is Now: Digital Liquid Analysis in Water/Wastewater
- Contingency Planning for Emergency Pipeline Repair – Lessons Learned
- Basic Hydraulics and Portable Pump System Design
- Our 15 Year Journey: History and Ongoing Impacts of PFAS within the Tucson Basin
- Designing SCADA and Communications Resilience in a Challenging Environment
- Resilient Pipeline for Landslides and Settlement with Corrosion Protection
- PFAS Rule Updates: State Perspective
- Pass on the Pepto, We have UV!!!
- Leadership in Crisis: Rebuilding Trust and Infrastructure
- Funding and Support for Water and Wastewater Infrastructure in Hawaii
- Water Disinfection using Diaphragm or Peristaltic Pumps, Accessories and Systems
- Four Tenets of Pressure Vessel Design
- Salt to Fresh - The feasibility of Desalination on Maui
- Successful Contaminant Removal and IX with Simultaneous Corrosion Control
- From Beginning to End: The Story of GAC – Filter Startup to Media Reactivation
- Overview of Domestic Requirements for Federally Funded Infrastructure Projects
- Sensing the Future: Utilizing AI in Water & Wastewater Analysis
- Tsunami Design - Using Innovation to Ride the Waves of Recent Code Changes
- The Role of Smart Tanks in Distribution Water Quality Management
- Optimizing Water Quality in Drinking Water Distribution Systems
- Evaluating Technologies for PFAS Removal in Drinking Water Applications
- Water Loss Control - Practical Approaches
- Assessment of RO Fouling in MBR-RO Trains using Flat-Plate MBR Membranes
- Design of Roll-Out and Lift-Out Sections for Improved Pipeline Access
- Rethinking Water Distribution in the aftermath of the Lahaina Wildfires
- Key Takeaways from Lahaina Wildfire Damage Assessment for Water Infrastructure

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- Designing SCADA and Communications Resilience in a Challenging Environment
- Our SCADA is Isolated, What Risk?
- Nitrification Control in Italian PWS Using a Novel Monochloramine Generator
- Corrosion Control for Ductile Iron Pipe
- Four Projects in Two Years - How to Streamline Asset Management Implementations
- A Holistic Data-Driven Approach to Water Quality and Pressure Management
- Steel Water Storage Tanks: How to Mitigate Corrosion and Reduce Carbon Footprint
- Navigating Kauai's Water Future: Insights from the Water Systems Investment Plan
- Dewatering Water and Wastewater Plant Residuals with Screw Presses
- Methods for the Design of Tsunami-Resilient Water and Wastewater Infrastructure
- Pipe Dreams: Optimizing Pipeline Rehab and Replacement
- PFAS in Water Utilities – Public, Technical, and Operational Pathways to Success
- VFD's: Smart Devices to Control and Protect your Critical Assets
- Funding Alignment Tool – Simple Tools to Maximize Funding Opportunities
- Aging Infrastructure? VFD's, a perfect fit!
- Key Takeaways from Lahaina Wildfire Damage Assessment for Water Infrastructure
- One Water Honolulu: Mapping Water Infrastructure Climate Vulnerabilities
- Resilient and Sustainable Water Mains
- Thrust Restraint for Ductile Iron Pipe
- Metering 2.0 – The benefits of Smart Water Meters to Solve Utility Challenges
- Flowing Water: Federal Funding in and for our Communities
- Advanced Monitoring Solutions – Sensors, Software, analytics, A.I.
- Navigating the Lead and Copper Rule Revisions
- Identification of Disinfection Byproduct Precursor Compounds in JP-5 Jet Fuel
- Considerations for Choosing an Actuator
- Removal Technologies and Costs for Dieldrin in Hawaiian Groundwaters
- LCRR Compliance: Lessons Learned from Inventory Development and What's Next
- The Honolulu Board of Water Supply's Approach to Addressing PFAS
- Optimizing Municipal Water Supply: A Cost-Benefit Analysis of Water Sources

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- Protecting O’ahu's Groundwater: Implementing the Source Water Protection Plan
- The Hawaii Infrastructure Task Force: The Army’s Plan to Fix their Water System
- EPA’s Water Infrastructure and Technical Assistance Programs Update
- Dead-End Danger Zone Dangers of uncirculated water in distribution dead-ends
- Reinventing the Wheel: Utilizing SCADA for Centralized Data Analytics
- SCADA Alarm Management Technologies, Tips & Tricks
- DWSRF
- Aligning Your Top Projects with Federal Funding Priorities
- The Red Hill Remediation Journey
- Innovations in Steel Water Pipe
- Starting Earlier than Early: Taking a Holistic Approach to Funding CIP Programs
- LCRR & LCRI Updates
- Forensic Testing for Jet Fuel in Drinking Water
- Predicting Groundwater Head Dynamics in Tangshan Plain with ML Techniques
- County of Maui Department of Water Supply Response to 2023 Maui Wildfires
- Managing Critical Assets with Machine Learning
- The Role of Automatic Self-Cleaning Filters in Sustainable Water Filtration
- Optimizing Water Systems
- Leverage Automation and Digital Technologies to Optimize Operations

Repeating Courses

- 16 **Hazardous Materials Handling, Emergency Response, & Hazardous Waste Management, SPCC, Discharge Management**
California Water Service
2.0 Contact Hours
0.2 CEUs
- This course covers process for chemical procurement as it relates to employee safety, proper chemical storage, labeling, safe usage, spill emergency and personal protective equipment, storage inspection, and appropriate emergency spill response. It also covers basic familiarity of responsibilities of generators of hazardous waste. Additionally, it covers SPCC and Discharge management for potable water discharges training.
- 17 **Systems for Handling, Feeding, and Delivering Bulk Solids in Small and Large Bags**
Cleanwater1
1.0 Contact Hours
0.1 CEUs
- This course provides a review of equipment used to handle and dose a variety of chemicals that are commonly used in water treatment processes and are delivered in 50-pound bags and 2,000-pound SuperSacks.

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- 18 **High-Density Lime Systems – Operation and Design Considerations**
Cleanwater1 This course provides an in-depth review of High-Density Lime systems, as well as
1.0 Contact Hours special considerations surrounding system design and operation.
0.1 CEUs
- 19 **Community Responder Essentials**
AED Institute of America Topics:
4.0 Contact Hours
 - Medical Emergencies
 - First Aid
 - CPR/AED
 - Bleeding Control
 - Naloxone/Opioids**0.4 CEUs**
- 20 **Driver Improvement Program**
Department of Human Resources This course provides a driver improvement program to those that drive vehicles
7.0 Contact Hours requiring a Class 4 license and or Commercial Drivers License. This program shall
0.7 CEUs provide annual driver safety courses to help the driver learn to recognize and
watch for hazards, deal with emergencies, and ensure driver's fitness to operate
a vehicle.

Correspondence/Online Courses

- 21 **Nuts, Bolts, & Gaskets – An Introduction**
CEU Plan Topics:
2.0 Contact Hours
 - Introduction to Fasteners
 - Types of Bolts
 - Standards
 - Bolt Properties and Nuts
 - Gaskets
 - Modern Gasket Design and Gasket Failures**0.2 CEUs**
- 22 **Operator Math Made Easy – Overview**
CEU Plan Topics:
1.0 Contact Hours
 - Introduction to Area Formulas and the Power Circle Method
 - Review of Volume Formulas
 - Describe the Flow Rate Formula**0.1 CEUs**
- 23 **Testing a Reduced Pressure Principle Backflow Prevention Device**
CEU Plan Topics:
3.0 Contact Hours
 - Identify a cross connection
 - Evaluate the various backflow prevention devices
 - Describe the pressure differential between pressure gauge assemblies
 - Perform a field testing of the RPZ with a three-valve test kit
 - Illustrate the sequence of flushing a test cock
 - Calibrate a test kit**0.3 CEUs**

24 Consumer Confidence Report and Public Notification Rules

CEU Plan

1.0 Contact Hours

0.1 CEUs

Topics:

- Describe the revisions to the Consumer Confidence Reports
- Explain the requirements of the Public Notification Rule
- List the notification methods available to circulate a CCR
- Understand the basic CCR requirements
- Indicate the steps to a public notice program

25 Corrosion Control for the Management of Lead and Copper at Customer Taps

AWWA eLearning

2.0 Contact Hours

0.2 CEUs

Topics:

- Summarize the risks of lead and copper in drinking water.
- Explain how lead and copper enters drinking water and ends up at customer taps.
- Identify actions you are required to take under the revised Lead and Copper Rule to reduce lead and copper levels in your system.

26 Customer Metering and Billing Operations for Optimized Revenue Capture

AWWA eLearning

2.5 Contact Hours

0.25 CEUs

Topics:

- Explain the value of water and need for revenue.
- Describe how utility policies can affect financial stability.
- Explain how utilities meter customer water consumption and bill for this service.
- List common water meters in use and types of meter reading systems.
- Detail good meter management practices – accuracy testing and meter replacement.
- Identify potential for billing errors and unauthorized consumption that siphon away revenue.
- Tabulate consumption and billing data reliably to track revenue capture and flag errors.
- Determine ways to improve metering & billing operations in your system.

27 Effective Leakage and Pressure Management to Contain System Leakage

AWWA eLearning

2.0 Contact Hours

0.2 CEUs

Topics:

- Explain how leakage occurs in water distribution systems and the problems leakage causes.
- Describe how leakage imparts direct and indirect costs on water utility operations.
- Define proactive leakage management and its key activities.
- Identify the ways to detect leaks and pinpoint them.
- Assess your system's pressure levels and potential for improved pressure management.
- Determine the best actions to monitor and control leakage in your system.

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Mainland Courses

28 2025 Virtual Operator Conference

Illinois State Water Survey and RCAP
2/4-6/25
12 sessions at 1 hour each for 0.1 CEUs each

Topics:

- Maintaining Sampling Requirements and Schedules in a Community Well System
- Using Excel for Compliance Reports
- Water Quality Monitoring and Testing
- Understanding Water Loss
- Fundamentals of Cybersecurity
- Effective Contingency Planning
- Chlorine & Chlorine Meters
- PFAS – Where are we now?
- Backflow for the Small Town
- Distribution System and Water Quality
- Leak Detection Methods
- How to Create a Flushing Program

29 2024 WaterPro Conference

NRWA
9/9-11/24
9.0 Contact Hours
0.9 CEUs

Topics:

- Deploying GIS & GNSS
- Microbial Induced Corrosion on Ductile Iron Control Valves
- Water Loss and Conservation
- On-Ste Sodium Hypochlorite Generation for Disinfection
- Locating Lead and Copper Lines Without Digging or Excavating
- Web GIS Enabling Digital Maps and Data Collection
- Addressing Water Quality Degradation
- Closing Cybersecurity Gaps
- Rural Water Workforce