



## **Certified Water Efficiency Professionals**

An Industry Recognized Certification for Energy Management  
& Water Conservation Professionals

# CERTIFICATION SCHEME **1.0**

Version No: 1.0  
Effective Date: 12/08/2025



## Scope

Certified Water Efficiency Professionals focus on or expand their knowledge base into the specific area of water management. This may include improving water usage and efficiency in an existing building or implementing a sustainability program that includes water efficiency for their firm or organization. These individuals will understand water systems and technologies and will have specific knowledge on utility billing practices and policies, incentives, and water specific mandates made by local municipalities, federal, or state governments. They use their specialized knowledge to assist firms or organizations, they audit existing systems, set realistic goals for new projects and get the most significant benefits when implementing systems at a small or large scale.

Certified Water Efficiency Professionals demonstrate competency in the following areas that are included in the CWEP™ Body of Knowledge to gain certification: introduction to general water conservation; policy, standards, and regulations; value of water and benchmarking; water metering; water balance & audit approach; measurement & verification (M&V); water treatment; domestic plumbing fixtures; commercial kitchen equipment; laundry equipment; cooling towers and steam boilers; pools and other open water bodies; irrigation; additional ICI (institutional, commercial, and industrial) water uses; medical, research, and lab equipment; and storm water management and alternative water sources.



# Eligibility Requirements for Competence

Individuals applying for the CWEP™ Certification Examination must attend an approved preparatory training course, meet the following education, experience requirements, and complete a certification application.

## Education and Experience Requirements

Education and Experience
2-year technical degree, 4-year degree, or equivalent
2- year related* experience
Military Veteran
Current status of Certified Energy Manager® (CEM®), Certified Energy Auditor (CEA™), Business Energy Professional (BEP®), or Energy Efficiency Practitioner (EEP™)
Currently employed at a company in related* field

\* Related experience in water efficiency, energy management, or technical maintenance of a building or facility

## Examination Requirements for Competence

To earn the CWEP™ Certification, candidates must pass the certification examination. The competency requirements assessed are the following:

### Certified Water Efficiency Professional - Examination Blueprint

<b>Body of Knowledge / Duties and Tasks (% Exam)</b>	
<b>1</b>	<b>Introduction to General Water Conservation (2% - 4%)</b>
101	Introduction
102	Common Terms and Definitions
103	Information Resources and References
104	Units and Conversions
<b>2</b>	<b>Policy, Standards, and Regulations (2% - 4%)</b>
201	Fundamental Principals
202	International Policy and Standards
203	Regulations and Exemptions - International, Regional / Provincial
204	Sustainable Water Use and Reporting - Green Buildings - ESG and Water Footprinting - SDGs and Reporting Frameworks
<b>3</b>	<b>Value of Water and Benchmarking (4% - 6%)</b>
301	Water & Watershed Costs - Water / Sewer Billing - Non-billed / Associated Costs (Treatments, Infrastructure, Energy)
302	True Cost of Water (Costs at Point of Use, Billed Water, Lost Opportunity Costs for Other Users)
303	Benchmarking - References - Calculations

<b>Body of Knowledge / Duties and Tasks (% Exam)</b>	
<b>4</b>	<b>Water Metering (4% - 6%)</b>
401	Water Distribution Networks and Metering Locations
402	Common Water Meter Technologies, Measurements, and Loss Detection
403	AMR / AMI
404	Water Management Technology Progression (Monitoring, Recording, Controlling)
<b>5</b>	<b>Water Balance &amp; Audit Approach (4% - 6%)</b>
501	Intent, Scope, and Approach to Water Balances and Reticulation
502	Water Balance (Purpose, Development, and Applications / Uses)
503	Audit Goals
504	Levels of Water Audits
505	Auditing Process (Step by Step)
506	Audit Outcomes (Presentation, Opportunities, and Prioritization)
<b>6</b>	<b>Measurement &amp; Verification (3% - 5%)</b>
601	M&V Purpose and Approach
602	M&V for ESPC
603	M&V Tools & Equipment
<b>7</b>	<b>Water Treatment (6% - 10%)</b>
701	Fundamentals of Water Chemistry
702	Filtration
703	Ion Exchange Systems
704	Ultrafiltration to Reverse Osmosis
705	Diverse Water Treatment Systems
706	Recommend Hardware & Process Strategies
707	Energy and Water Savings Calculations
<b>8</b>	<b>Domestic Plumbing Fixtures (8% - 12%)</b>
801	Toilets (Configurations, Flush Curves)
802	Urinals (Water Consumption)
803	Faucets & Showers
804	Water Efficiency Strategies
805	Electronic Plumbing Controls & IoT Devices
806	Consumption Calculations

<b>9</b>	<b>Commercial Kitchen Equipment (5% - 7%)</b>
901	Standard Equipment and Utilization Overview
902	Energy & water Savings Calculations
<b>10</b>	<b>Laundry Equipment (6% - 8%)</b>
1001	Residential / Light Commercial Equipment and Utilization
1002	Commercial / Industrial Laundry Equipment and Utilization
1003	Water Discharge Uses and Recycle Options
1004	Energy & Water Savings Calculations
<b>11</b>	<b>Cooling Towers and Steam Boilers (8% - 12%)</b>
1101	Cooling Tower Process Overview
1102	Potential Cooling Tower Water Loss and Use Equations
1103	Cycles of Concentration (CoC) Concept
1104	Cooling Tower Water Conservation Strategies
1105	Steam Boiler Process Overview
1106	Potential Boiler Water Loss and Use Equations
1107	Steam Boiler Water Conservation Strategies
1108	Energy & Water Savings Calculations
<b>12</b>	<b>Pools and Other Open Water Bodies (5% - 7%)</b>
1201	Open Water Body Types and Utilization Overview
1202	Water Uses vs Energy Loss
1203	Filtration Systems & Backwashing
1204	Surface Water Covers
1205	Ozone and Other Treatments
1206	Water Conservation Strategies
1207	Evaporative & Backwash Loss Calculations
<b>13</b>	<b>Irrigation (7% - 11%)</b>
1301	Irrigation Types and Application Overview
1302	Landscape Design vs Irrigation Demand
1303	Irrigation System Audits
1304	Irrigation System Deficiencies
1305	Smart Irrigation Strategies
1306	Consumption & Cost Savings Calculations

<b>Body of Knowledge / Duties and Tasks (% Exam)</b>	
<b>14</b>	<b>Additional ICI (Institutional, Commercial, and Industrial) Water Uses (5% - 7%)</b>
1401	Water Cooled Mechanical Equipment
1402	Industrial Processes and Equipment
1403	Important Conversions & Calculations
<b>15</b>	<b>Medical, Research, and Lab Equipment (6% - 8%)</b>
1501	Hospital Water Balance
1502	Sterilizers & Lab Equipment (Calculations)
1503	Medical Equipment (List)
1504	Dialysis Equipment
1505	X-ray Equipment & Film Developers
1506	Vacuum & Compressed Air Systems
1507	Hardware & Process Recommendations
<b>16</b>	<b>Storm Water Management and Alternative Water Sources (5% - 7%)</b>
1601	Water Type Terminology
1602	Water Sources (Common & Alternative)
1603	Water Harvesting (Methods & Calculations)
1604	Regulations & Impervious Area Charges
1605	Constructed Solutions for Mitigation
1606	Green Buildings

## Examination Specifications

The examination will be 4-hours, open book / open notes and follow the specifications outlined in the examination blueprint and will include 100 multiple-choice graded questions in accordance with the percentage range for each task.

## Code of Ethics

Codes of Practice are found in the Code of Ethics for Certified Professionals V1.1 dated November 21, 2019, available at [www.aeecenter.org/CodeOfEthics](http://www.aeecenter.org/CodeOfEthics)

## Recertification Requirements

A CWEP™ must accumulate ten professional credits every three years and submit a completed Renewal Form to AEE to remain certified. Professional credits for recertification can be accumulated at any time within the three-year period. Detailed explanation of activities applicable as credits for certification renewal available at [www.aeecenter.org/certification/renewal](http://www.aeecenter.org/certification/renewal)

### Activities for CWEP™ Renewal Credits

Continued employment in water efficiency activities:

- **1 credit per year**

Membership in a professional engineering society

- **1 credit per year**

Offices held in a professional engineering society:

- **1 credit per year**

Continuing education (CEU's) / professional activities (seminars or conferences) including but not limited to water efficiency

- **2 credits per CEU, college credit hour or 10 contract hours for training**

Awards presented and/or papers published involving water efficiency:

- **1 credit per: one energy-related presentation**
- **2 credits per: one energy-related paper**
- **2 credits per: one energy-related individual award**

Certified Professionals who do not acquire sufficient CWEP maintenance points to be recertified on the recertification date will no longer have an active certification and be notified in writing of suspension from using the CWEP designation. They will also no longer be listed as a CWEP in any AEE publication. A lapsed CWEP must resubmit to the certification process and successfully meet the criteria for certification by personal data information and examination. Another option for certified professionals is to acquire make-up points at a cumulative total equal to 3.5 per year for every year since date of expiration. This option is available one-time only. Certifications that have lapsed more than three renewal cycles must retake the CWEP exam.

A CWEP, upon retiring and/or and reaching the age of sixty-five, can be designated as "CWEP™ – Retired," will no longer be required to pay renewal fees, and will no longer be listed in our directory of actively practicing CWEPs. No further reporting is necessary except to notify AEE of meeting the age requirement by sending a copy of the retired CWEP's Driver's License and completing the Retired Certification Request Form online.

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