



**WaterSense® Specification for Irrigation System
Designer Certification Programs**

Version 1.1

July 24, 2014

WaterSense® Specification for Irrigation System Designer Certification Programs

1.0 Scope and Objective

This specification establishes criteria for the labeling of certification programs for irrigation system designers under the U.S. Environmental Protection Agency's (EPA's) WaterSense program. It applies to certification of irrigation professionals who develop the design of new irrigation systems and/or modifications to existing irrigation systems. The purpose of the label is to identify programs that certify irrigation designers who demonstrate the ability to apply water efficiency concepts as a fundamental component of their practice.

This specification should be read in concert with the *WaterSense Professional Certification Program Labeling System*, which includes requirements that all programs shall meet.

2.0 Criteria for WaterSense Labeling

To be labeled under the WaterSense program, a certification program shall meet the following criteria:

2.1 Experiential Requirement

The certification shall require that the applicant have a minimum of three years of demonstrated experience in the field of irrigation design. The oversight committee shall establish the standard of proof for the experiential requirement.

2.2 Exam Requirement

The certification shall include a requirement for the successful completion of an exam or series of exams that encompass the content and passing-score requirements outlined below. The exam process may include a written component, field component, or combination of the two.

2.2.1 Exam Content

The exam process should be structured so that passing practitioners shall have demonstrated proficient applied knowledge in the following subject areas and their relationships to water efficiency (Note: Exam content is not limited to these subject areas, as they are provided as a minimum for earning the WaterSense label):

- Design, operation, and scheduling for water efficiency.
- Preparation of irrigation design reflecting site requirements.
- Soil/water/plant relationships.
- Slope and runoff.
- Equipment selection and specification.

- System hydraulics.
- System pumps.
- System pressure.
- Maintenance.
- Evaluation of available water sources.
- Water management (e.g., budgeting and consumption).
- Awareness of other aspects of good practice, such as U.S. Occupational Health and Safety Administration guidelines, electrical and plumbing codes, and when local and state regulations supersede federal regulations.
- Recent innovations and technological developments, including WaterSense labeled technologies.

2.2.2 Exam Passing Score

The passing score on an exam shall provide an objective level of assurance that the concepts listed above are understood and can be applied by the practitioner.

2.3 Renewal Process

The certification shall have a renewal process with a set period for validity and specific requirements for maintenance of proficiency as outlined in this section.

2.3.1 Expiration

An individual's certification shall be renewed at least once every two years, or more frequently as established by the oversight committee.

2.3.2 Maintained Proficiency

The renewal process shall require the submission of documentation that the practitioner has maintained proficiency in the subject matter (e.g., continuing education units). The professional certifying organization (PCO) shall demonstrate that a minimum of 50 percent of proficiency requirements are related to water-efficient concepts in the field of irrigation (see Section 4.0). The oversight committee shall establish valid documentation requirements of maintained proficiency. The PCO shall either request submission of this documentation or have an auditing process in place to ensure individuals are completing their maintained proficiency requirements.

3.0 Effective Date

This specification is effective as of July 24, 2014.

4.0 Definitions

Independent Oversight Committee: A committee established by the PCO that supervises the certification program while exercising independent, professional judgment. This committee shall act as a governing body for the certification program and be responsible for establishing policies

and requirements. It shall be composed of at least three professionals who are recognized for their expertise in the relevant professional field. No more than one-third of the positions may be held by employees of the PCO.

Irrigation System Designer: An individual who develops the design of new irrigation systems and/or modifications to existing irrigation systems.

Water-Efficient Concepts: Any concept directly related to best practices in the field of irrigation that promotes more efficient use of water outdoors. These include, but are not limited to smart scheduling technologies for irrigation systems, irrigation scheduling based on water budget techniques, drip irrigation, plant water demand, rainwater harvesting, and low impact development. The following concepts are examples of those that shall not be considered as water-efficient concepts: electrical systems, renewable energy, business practices, marketing, or nutrient/pesticide management.

Appendix A: Informative Annex for WaterSense Labeling

Programs earning the WaterSense label shall meet the following requirements:

1.0 General Approval

PCOs offering labeled programs shall have their eligibility requirements approved by EPA in accordance with the *WaterSense Professional Certification Program Labeling System*.

2.0 Program Conformance

Conformance to this specification shall be assessed and approved by EPA.

3.0 WaterSense Partnership

PCOs must have a signed partnership agreement in place with EPA prior to receiving the WaterSense label for a certification program.