

Summary of Revisions to the WaterSense® New Home Specification

The U.S. Environmental Protection Agency's (EPA's) WaterSense program is announcing the release of Version 1.2 of its *WaterSense New Home Specification*, which expands the pool of eligible irrigation design, installation, and auditing professionals available to builders. WaterSense also took the opportunity to make minor editorial changes to the specification and to remove outdated information regarding the requirements for selecting irrigation controllers.

The purpose of this document is to summarize the specification revisions related to irrigation professionals, share the reasoning for the change, and provide information to help with the transition.

It is important to note that EPA considers the revisions made in Version 1.2 of the specification to be minor in nature. The revisions do not materially affect the specification's scope or requirements.

Background

Concurrent with the release of Version 1.2 of the *WaterSense New Home Specification*, WaterSense released its *WaterSense Professional Certification Program Labeling System* (Program Labeling System) and three revised specifications for professional certification programs, which modify how the program engages with irrigation professionals. WaterSense is no longer partnering with individual professionals, including irrigation professionals. This change expands the program's recognition of and opportunities for all irrigation professionals certified by a WaterSense labeled program. As a result of this change, WaterSense is revising the requirements in the *WaterSense New Home Specification* to allow for irrigation system design and/or installation and the irrigation system audit to be completed by any irrigation professional who is certified by a WaterSense labeled program. The sections below highlight the specific revisions made in Version 1.2 of the *WaterSense New Home Specification* related to this change and provide information to help builders identify eligible certified irrigation professionals.

Summary of Specification Revisions

This section identifies in redline and strikethrough the revisions made in Version 1.2 of the *WaterSense New Home Specification*. Minor editorial changes are not included here. These changes effectively expand the pool of eligible irrigation professionals who can design and/or install and audit the irrigation system to any irrigation professional certified by a WaterSense labeled program. In addition, WaterSense removed outdated information regarding the requirements for selecting irrigation controllers.

Section 4.2 Irrigation System

- 4.2.1 Design and installation – All irrigation systems shall be designed or installed by a ~~WaterSense irrigation partner~~ an irrigation professional certified by a WaterSense labeled program. *[Note that the term “irrigation professional” now links to the new Directory of Certified Professionals as discussed below in the Timeline and Plan for Implementing Version 1.2 of the WaterSense New Home Specification].*

Waivers from this requirement may be available if there are an insufficient number of available ~~WaterSense irrigation partners~~ certified irrigation professionals. See [Appendix C](#) for details on determining whether there are a sufficient number of available ~~partners~~ certified irrigation professionals in your area.

- 4.2.2 Post-installation audit – All irrigation systems shall be audited by a ~~WaterSense irrigation partner~~ certified irrigation professional. Auditing procedures are described in the *Guidelines for Irrigation Audits on WaterSense Labeled New Homes* at www.epa.gov/watersense/nhspecs/nh_irr_materials.html www.epa.gov/watersense/docs/home_irr-audit-guidelines508.pdf.

Waivers from this requirement may be available if there are an insufficient number of available ~~WaterSense irrigation partners~~ certified irrigation professionals. See [Appendix C](#) for details on determining whether there are a sufficient number of available ~~partners~~ certified irrigation professionals in your area.

- 4.2.4 Runoff/overspray – Irrigation systems shall be designed and installed to sustain the landscape without creating runoff or direct overspray during a minimum operating duration.

Runoff and direct overspray shall be measured during the post-installation audit. The ~~WaterSense irrigation partner~~ certified irrigation professional shall determine the minimum operating duration based on landscape conditions and irrigation system design.

- 4.2.7 Irrigation controllers – ~~As of June 1, 2013,~~ irrigation systems shall be equipped with WaterSense labeled weather-based irrigation controllers or soil moisture sensor-based irrigation controllers that contain the following capabilities in both smart and standard mode:
1. The controller shall be capable of preserving the contents of the irrigation program settings when the power source is lost and without relying on an external battery backup.
 2. The controller shall either be capable of independent, zone-specific programming or storing a minimum of three different programs to allow for separate schedules for zones with differing water needs.

3. The controller shall be capable of indicating to the user when it is not receiving a signal or local sensor input and is not adjusting irrigation based on current weather or soil moisture conditions.
4. The controller shall be capable of interfacing with a rainfall device.
5. The controller shall be capable of accommodating watering restrictions as follows:
 - Operation on a prescribed day(s)-of-week schedule (e.g., Monday-Wednesday-Friday, Tuesday-Thursday-Saturday; any two days; any single day).
 - Either even-day or odd-day scheduling, or any day interval scheduling between two and seven days.
 - The ability to set irrigation runtimes to avoid watering during a prohibited time of day (e.g., between 9:00 a.m. and 9:00 p.m.).
 - Complete shutoff (e.g., on/off switch) to accommodate outdoor irrigation prohibition restrictions.
6. The controller shall include a percent adjust (water budget) feature.¹
7. If the primary source of weather or soil moisture information is lost, the controller shall be capable of reverting to either a proxy of historical weather data or a percent adjust (water budget) feature.
8. The controller shall be capable of allowing for a manual operation troubleshooting test cycle and shall automatically return to smart mode within some period of time as designated by the manufacturer, even if the switch is still positioned for manual operation.

~~Prior to June 1, 2013, irrigation systems must be equipped with controllers (weather based or using soil moisture sensors) that contain the features listed above.~~

A list of labeled weather-based irrigation controllers can be found at www.epa.gov/watersense/product_search.html.

- 4.2.10 Schedule – Two watering schedules, developed by the ~~WaterSense irrigation partner~~ **certified irrigation professional** as part of the post-installation audit, shall be posted at the controller. One schedule shall be designed to address the initial grow-in phase of the landscape, and the second schedule shall be designed to address an established landscape. Both schedules shall vary according to the seasons.

Section 7.0 Definitions

~~WaterSense irrigation partner~~—A professional certified through a WaterSense labeled program who has by demonstrating expertise in water efficient irrigation technology and techniques. The specifications for professional certification programs can be found at

¹ The percent adjust (water budget) feature is defined as having the means to increase or decrease the runtimes or application rates for zones by means of one adjustment without modifying the settings for each individual zone.

www.epa.gov/watersense/partners/product_program_specs.html, and a listing of WaterSense irrigation partners organized by state can be found at www.epa.gov/watersense/meet_our_partners.html.

Irrigation Professional Certified by a WaterSense Labeled Program (Certified Irrigation Professional) – A professional certified by a WaterSense labeled program who has demonstrated expertise in water-efficient irrigation technology and techniques. The specifications for professional certification programs can be found at www.epa.gov/watersense/partners/product_program_specs.html, and WaterSense's Directory of Certified Professionals can be found at www.epa.gov/watersense/findapro. For irrigation professionals interested in obtaining certification, a complete list of WaterSense labeled certification programs can be found at http://www.epa.gov/watersense/outdoor/cert_programs.html. [Note that the link for the new Directory of Certified Professionals is included here in regards to finding a certified irrigation professional as discussed below in the Timeline and Plan for Implementing Version 1.2 of the WaterSense New Home Specification].

Appendix C

Identifying Available ~~WaterSense Irrigation Partners~~ Certified Irrigation Professionals

WaterSense has labeled certification programs for irrigation professionals in three categories: designers; installation and maintenance professionals; and auditors. Criteria 4.2.1: Design and installation and 4.2.2: Post-installation audit require the use of an ~~WaterSense irrigation partner~~ irrigation professional who is:

- A certified designer, to design the irrigation system, or a certified installation/maintenance professional, to install the irrigation system (4.2.1).

AND

- A certified auditor, to audit the irrigation system (4.2.2).

If there are fewer than three available ~~WaterSense irrigation partner~~ irrigation professionals who are certified designers *and* fewer than three available ~~WaterSense irrigation partner~~ irrigation professionals who are certified installation/maintenance professionals that provide services to the city, county, or metropolitan area where the home is located, an exemption from criterion 4.2.1 may apply.

If there are no available ~~irrigation partners~~ irrigation professionals who are certified auditors that provide services to the city, county, or metropolitan area where the home is located, an exemption from criterion 4.2.2 may apply.

The following steps should be followed to determine if there are a sufficient number of available ~~irrigation partners~~ certified irrigation professionals to comply with criteria 4.2.1 and 4.2.2.

4.2.1 – Design and installation

1. Go to the ~~WaterSense website~~ **WaterSense's Directory of Certified Professionals** at ~~www.epa.gov/watersense/meet_our_partners.html~~ **www.epa.gov/watersense/findapro.html** and review the list of ~~WaterSense irrigation partner~~ **certified irrigation professionals** by ~~state~~ **location**. *[Note that the link has been updated to direct to the new Directory of Certified Professionals as discussed below in the Timeline and Plan for Implementing Version 1.2 of the WaterSense New Home Specification].*
 2. If there are three or more ~~irrigation partners~~ **professionals** who are certified designers or three or more ~~irrigation partners~~ **professionals** who are certified installation/maintenance professionals that perform irrigation services in the city, county, or metropolitan area where the home is being built, contact the individuals to determine if they are accepting new residential work. If at least three ~~partners~~ **certified irrigation professionals** in one of the categories are accepting new residential work, there is no exemption.
 3. If there are fewer than **three irrigation professionals who are** certified designers ~~partners~~ and fewer than three **irrigation professionals who are** certified installers ~~partners~~ **installation/maintenance professionals** ~~partners~~ that identified the city, county, or metropolitan area where the home is being built as areas in which they work, but there are additional ~~partners~~ **irrigation professionals** with the appropriate certification indicating they perform work throughout the state, either:
 - Contact the individual ~~irrigation partners~~ **certified irrigation professionals** to determine if they perform irrigation services in the city, county, or metropolitan area where the home is being built and are available to take on additional residential work.
- OR
- Contact the WaterSense Helpline to ask for assistance in determining if there are three or more available ~~irrigation partners~~ **irrigation professionals** with the appropriate certifications that perform irrigation services in the area where the home is being built.
- If at least three ~~partners~~ **certified irrigation professionals** in one of the categories are accepting new residential work, there is no exemption.
4. If there are neither three **irrigation professionals who are** certified designers ~~partners~~ **nor** three **irrigation professionals who are** certified installers ~~partners~~ **installation/maintenance professionals** ~~partners~~ that perform residential work in that state, the home is exempt from the requirement(s) to have the irrigation system designed and/or installed by a ~~WaterSense irrigation partner~~ **certified irrigation professional**. Contact the WaterSense Helpline to request a waiver from the requirement(s).

4.2.2 Post-installation audit

1. Go to the ~~WaterSense website~~ **WaterSense's Directory of Certified Professionals** at ~~www.epa.gov/watersense/meet_our_partners.html~~ www.epa.gov/watersense/findapro.html and review the list of ~~WaterSense irrigation partners~~ **certified irrigation professionals** by ~~state~~ location. *[Note that the link has been updated to direct to the new Directory of Certified Professionals as discussed below in the Timeline and Plan for Implementing Version 1.2 of the WaterSense New Home Specification].*
 2. If there is at least one ~~irrigation partner~~ **irrigation professional** who is a certified auditor that performs irrigation services in the city, county, or metropolitan area where the home is being built, contact the individual to determine if he/she is accepting new residential work. If at least one ~~partner~~ **certified irrigation professional** is accepting new work, there is no exemption.
 3. If no ~~WaterSense irrigation partners~~ **irrigation professionals** who are certified auditors identified the city, county, or metropolitan area where the home is being built as areas in which they work, but there is at least one ~~partner~~ **irrigation professional** who is a certified auditor indicating he/she performs work throughout the state, either:
 - Contact the individual ~~irrigation partner(s)~~ **certified irrigation professional(s)** to determine if they perform irrigation services in the city, county, or metropolitan area where the home is being built and are available to take on additional residential work.
- OR
- Contact the WaterSense Helpline to ask for assistance in determining if there is an available irrigation ~~partner~~ **professional** who is a certified auditor that performs irrigation services in the area where the home is being built. If at least one ~~partner~~ **irrigation professional** who is a certified auditor is accepting new residential work, there is no exemption.
 4. If there are no ~~WaterSense irrigation partners~~ **irrigation professionals** who are certified auditors that perform residential work in that state, contact the WaterSense Helpline. The WaterSense Helpline will identify a professional who can perform the audit or will grant a waiver from the requirement(s).

Timeline and Plan for Implementing the Version 1.2 of the *WaterSense New Home Specification*

Version 1.2 of the *WaterSense New Home Specification* is effective immediately, as the changes only serve to expand the pool of eligible irrigation professionals who can design and/or install and audit the irrigation system to any irrigation professional certified by a WaterSense labeled program. To facilitate the transition and help builders identify eligible certified irrigation professionals, WaterSense has created a new Directory of Certified Professionals available on the WaterSense website at www.epa.gov/watersense/findapro.html.



Beginning July 24, 2014, concurrent with the release of Version 1.2 of the *WaterSense New Home Specification*, Licensed Certification Providers who certify and inspectors that inspect new home compliance shall verify that builder partners have had the irrigation system designed or installed, if applicable, and audited by a certified irrigation professional listed in, or otherwise linked from, the Directory of Certified Professionals. To facilitate this transition, WaterSense has updated the inspection checklists and guides and the associated Licensed Certification Provider and Inspector training materials. Licensed Certification Providers and Inspectors should use these updated materials to guide inspector training and the inspection and certification of new homes for the WaterSense program. Copies of the updated materials are available on the WaterSense website at http://www.epa.gov/watersense/new_homes/homes_final.html or may be obtained from the relevant EPA-approved Program Administrator. The existing licensing agreement between WaterSense and the Licensed Certification Provider will remain in full force and effect.