

Washington State Building Code Council • Code Change Cycle 2015

2015 Plumbing Proposals

Log #	Proponent	Code Section(s)	Title or Subject	TAG Review			Committee Action
				Meet Criteria?	Economic Impact	Recommendation	
15-P01	Mike Kennedy	WSEC C405 new section	Booster pumps				
<p>C405.10 Service Water Pressure Booster Systems. Service water pressure booster systems shall be designed such that</p> <ol style="list-style-type: none"> <u>one or more pressure sensors shall be used to vary pump speed and/or start and stop pumps. The sensor(s) shall either be located near the critical fixture(s) that determine the pressure required, or logic shall be employed that adjusts the setpoint to simulate operation of remote sensor(s).</u> <u>no device(s) shall be installed for the purpose of reducing the pressure of all of the water supplied by any booster system pump or booster system, except for safety devices.</u> <u>c. no booster system pumps shall operate when there is no service water flow.</u> 							
15-P02	DOH	UPC 407.3	Hot water/public lavs				
<p>407.3 Limitation of Hot Water Temperature for Public Lavatories. Hot water delivered from <i>public-use</i> lavatories shall be limited to a maximum temperature of 120°F (49°C) by a device that conforms to ASSE 1070 or CSA B125.3 The <i>water heater</i> thermostat shall not be considered a suitable control for meeting this provision. <u>Automatically mixed water (where the user cannot adjust the temperature) will be tempered water, between 85°F (29°C) and 105°F (41°C).</u></p>							
15-P03	DOH	UPC 408.3	Tub/shower control valves				
<p>408.3 Shower and Tub-Shower Combination Control Valves. Showers and tub-shower combinations in buildings shall be provided with individual control valves of the <i>pressure</i> balance, <i>thermostatic</i>, or combination <i>pressure</i> balance/<i>thermostatic</i>, mixing valve type that provide scald and thermal shock protection for the rated flow rate of the installed showerhead. These valves shall be installed at the point of use and in accordance with ASSE 1016 or ASME A 112.18.1/CSA B 125.1. <i>Gang showers</i>, where supplied with a single temperature-controlled water supply pipe, shall be controlled by a mixing valve that is in accordance with ASSE 1069. Handle position stops shall be provided on such valves and shall be adjusted per the manufacturer's instructions to deliver a maximum mixed water setting of 120°F (49°C) <u>between 105°F (40°C) and 110°F (43°C).</u> Where separate hot and cold water is provided, the hot water shall not exceed 120°F (49°C). The water heater thermostat shall not be considered a suitable control for meeting this provision.</p>							
15-P04	Dave Cantrell	UPC 507.2	Water heater strapping				
<p>507.2 Seismic Provisions. In seismic design categories C, D, E, and F <u>D0, D1 and D2</u>, and in townhouses in seismic design category C, <i>water heaters</i> shall be anchored or strapped to resist horizontal displacement due to earthquake motion. Strapping shall be at points within the upper one-third and lower one-third of its vertical dimensions. At the lower point, a distance of not less than 4 inches (102 mm) shall be maintained from the controls to the strapping.</p>							
15-P05	DOH	UPC 601.1	Backflow-general				

601.1 Applicability. This chapter shall govern the materials, design, and installation of *water supply systems*, including backflow prevention devices, assemblies, and methods and devices used for backflow prevention.

15-P06	DOH	UPC 609.9	Disinfection of potable water system				
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(4) The procedure shall be repeated ~~where it is shown by~~ when a standard bacteriological examination test for drinking water, performed by a laboratory certified for drinking water in Washington State, ~~made by an approved agency~~ shows unsatisfactory results indicating that contamination persists in the system.

15-P07	DOH	UPC 611.1	Drinking water treatment units				
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611.1 Application. Drinking water treatment units shall comply with NSF 42 or NSF 53. Water softeners shall comply with NSF 44. Ultraviolet water treatment systems shall comply with NSF 55. Reverse osmosis drinking water treatment systems shall comply with NSF 58. Drinking water distillation systems shall comply with NSF 62. The installation of a water treatment unit on a building that serves the public may result in the building being regulated as a public water system under chapter 246-290 WAC. The applicability of chapter 246-290 WAC shall be determined by the Washington Department of Health, Office of Drinking Water.

15-P08	DOH	UPC 612.2	Sprinkler protection				
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612.2 Types of Systems. This section shall apply to stand-alone and multipurpose wet-pipe sprinkler systems that do not include the use of antifreeze. A multipurpose fire sprinkler system shall provide *potable water* to both fire sprinklers and *plumbing fixtures*. A stand-alone sprinkler system shall be separate and independent from the *potable water* distribution system. ~~A backflow preventer shall not be required to separate a stand-alone sprinkler system from the water distribution system where the sprinkler system material is in accordance with the requirements of Section 604.0.~~

15-P09	Dave Cantrell	UPC 908.2.4	Horizontal wet vent				
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~~**908.2.4 Water Closet.** The water closet fixture drain or trap arm connection to the wet vent shall be downstream of fixture drain or trap arm connections to the horizontal wet vent.~~

15-P10	Steven Huff	UPC New Section 912	Air admittance valves				
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912.0: Air Admittance Valves

912.1: Individual and branch line plumbing vents shall be permitted to terminate with a connection to an air admittance valve (AAV) where conventional venting of the fixtures would be impractical or burdensome. AAV's shall only vent fixtures that are on the same floor level and connect to a horizontal branch drain. AAV's shall not be installed in non-neutralized special waste systems as described in Chapter 8 of the Uniform Plumbing Code unless specifically approved for such use by the manufacturer.

912.2: Air admittance valves shall conform to ASSE 1051. AAV's shall be installed in accordance with the requirements of this section and the manufacturer's installation instructions. The AAV shall be rated in accordance with the standard for the size of vent to which it is connected.

912.3: AAV's shall be located a minimum of four (4) inches above the branch drain or trap arm being vented and a minimum of six (6) inches above any insulation material. The AAV shall be located within the maximum developed length permitted for the vent in accordance with Chapter 7, Table 7-5. AAV's shall not be located in spaces utilized as a supply or return air plenum. AAV's shall not be used for venting a sump or ejector pump without written approval of the manufacturer.

912.4: AAV's shall be installed in accessible locations. The valve shall be located within a ventilated space that allows air to enter the valve, such as below a kitchen or bathroom cabinet. The AAV may be installed in a wall only if it is provided with a ventilated access panel and is approved for such installation by the manufacturer.

912.5: Relief Vent: A relief vent is not required on horizontal branch drains which connect to the drainage stack or building drain within four (4) branch intervals (stories) from the top of the stack. All other horizontal branch drains shall be provided with a relief vent that shall extend outdoors to the open air or shall connect to a vent stack or stack vent that terminates

outdoors to the open air. The relief vent shall connect to the horizontal branch drain between the stack or building drain and the most downstream fixture drain connected to the horizontal branch drain. The relief vent shall be at least ½ the diameter of the drain served, but in no case less than 1 ¼-inch in diameter, and shall be installed in accordance with Section 905.0 and the length limitations of Chapter 7, Table 7-5. The relief vent shall be permitted to serve as a vent for other fixtures.

15-P11	DOH	UPC 1501.1.1	Allowable use				
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1501.1.1 Allowable Use of Alternate Water. Where approved or required by the Authority Having Jurisdiction, alternate water sources [reclaimed (recycled) water, gray water, and on-site treated nonpotable water] shall be permitted to be used in lieu of potable water for the applications identified in this chapter. Reclaimed (recycled) water shall not be used to flush toilets or for other indoor use in any residential property or dwelling unit where residents have access to plumbing systems for repairs or modifications.

15-P12	DOH	UPC 1501.2	Alt. water source design				
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1501.2 System Design. Alternate water source systems shall be designed in accordance with this chapter by a registered design professional or who demonstrates competency to design the alternate water source system as required by the Authority Having Jurisdiction. Components, piping, and fittings used in an alternate water source system shall be listed.

Exceptions:

- (1) A registered design professional is not required to design gray water systems having a maximum discharge capacity of 250 gallons per day (gal/d) (0.011 L/s) for single family and multi-family dwellings.
- (2) A registered design professional is not required to design an on-site treated nonpotable water system for single family dwellings having a maximum discharge capacity of 250 gal/d (0.011 L/s).

15-P13	DOH	UPC Table 1501.5	Water source testing				
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**TABLE 1501.5
MINIMUM ALTERNATE WATER SOURCE TESTING, INSPECTION, AND MAINTENANCE FREQUENCY**

<u>DESCRIPTION</u>	<u>MINIMUM FREQUENCY</u>
Inspect and clean filters and screens, and replace (where necessary). Inspect and verify that disinfection, filters and water quality treatment devices and systems are operational and maintaining minimum water quality requirements as determined by the Authority Having Jurisdiction.	Every 3 months In accordance with manufacturer's instructions, and the Authority Having Jurisdiction.
Inspect pumps and verify operation.	After initial installation and every 12 months thereafter
Inspect valves and verify operation.	After initial installation and every 12 months thereafter
Inspect pressure tanks and verify operation.	After initial installation and every 12 months thereafter
Clear debris from and inspect storage tanks, locking devices, and verify operation.	After initial installation and every 12 months thereafter
Inspect caution labels and marking.	After initial installation and every 12 months thereafter
Inspect and maintain mulch basins for gray water irrigation systems.	As needed to maintain mulch depth and prevent ponding and runoff.
Cross-connection inspection and test*	After initial installation and every 12 months thereafter

* The cross-connection test shall be performed in the presence of the Authority Having Jurisdiction in accordance with the requirements of this chapter.

15-P14	DOH	UPC 1051.5.2	Maintenance log				
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1501.5.2 Maintenance Log. A maintenance log for ~~gray water and on-site treated nonpotable water~~ systems is required to have a permit in accordance with Section 1501.3 and shall be maintained by the property owner and be available for inspection. The property owner or designated appointee shall ensure that a record of testing, inspection and maintenance in accordance with Table 1501.5 is maintained in the log. The log will indicate the frequency of inspection and maintenance for each system.

15-P15	DOH	UPC 1501.6	O&M manual				
<p>1501.6 Operation and Maintenance Manual. An operation and maintenance manual for gray water and onsite treated water systems required to have a permit in accordance with Section 1501.3 <i>shall</i> be supplied to the <i>building owner</i> by the system designer. The operating and maintenance manual <i>shall</i> include the following:</p> <ol style="list-style-type: none"> (1) Detailed diagram of the entire system and the location of system components. (2) Instructions on operating and maintaining the system. (3) Details on maintaining the required water quality as determined by the <i>Authority Having Jurisdiction</i>. (4) Details on deactivating the system for maintenance, repair, or other purposes. (5) Applicable testing, inspection, and maintenance frequencies in accordance with Table 1501.5. (6) A method of contacting the manufacturer(s). 							
15-P16	Dave Cantrell	UPC 1501.7	Minimum water quality				
<p>1501.7 Minimum Water Quality Requirements. The minimum water quality for <i>alternate water source</i> systems <i>shall</i> meet the applicable water quality requirements for the intended application as determined by the <i>Authority Having Jurisdiction</i>. In the absence of water quality requirements, the EPA/625/R-04/108 contains recommended water reuse guidelines to assist regulatory agencies develop, revise, or expand <i>alternate water source</i> water quality standards.</p> <p>Exception: Water treatment is not required for gray water used for subsurface irrigation. <u>The treatment for gray water shall be oxidized, coagulated, filtered and disinfected, and consistent at all times with Class A reclaimed water or better.</u></p>							
15-P17	DOH	UPC 1501.7	Minimum water quality				
<p>1501.7 Minimum Water Quality Requirements. The minimum water quality for <i>alternate water source</i> systems <i>shall</i> meet the applicable water quality requirements for the intended application as determined by the <u>public health</u> <i>Authority Having Jurisdiction</i>. In the absence of water quality requirements, the EPA/625/R-04/108 contains recommended water reuse guidelines to assist regulatory agencies develop, revise, or expand <i>alternate water source</i> water quality standards.</p> <p>Exception: Water treatment is not required for gray water used for subsurface irrigation.</p>							
15-P18	Dave Cantrell	UPC 1501.12	Greywater – toilets/urinals				
<p>1501.12 Separation Requirements. Underground <i>alternate water source service piping</i> other than <i>gray water</i> <i>shall</i> be separated from the <i>building sewer</i> in accordance with this <i>code</i>. Treated nonpotable water <i>pipes</i> <i>shall</i> be permitted to be run or laid in the same trench as <i>potable water pipes</i> with a 12 inch (305 mm) minimum vertical and horizontal separation where both <i>pipe</i> materials are <i>approved</i> for use within a <i>building</i>. Where horizontal piping materials do not comply with this requirement the minimum separation <i>shall</i> be increased to 60 inches (1524 mm). The <i>potable water</i> piping <i>shall</i> be installed at an elevation above the treated nonpotable water piping.</p> <p><u>Gray water may be used to flush water closets and urinals, including within residential property or dwelling units, but only where the residents do not have access to the plumbing system for repairs or modifications.</u></p>							
15-P19	DOH	UPC 1501.13	Abandonment				
<p>1501.13.1 General. An abandoned system or part thereof covered under the scope of this chapter <i>shall</i> be disconnected from remaining systems, drained, plugged, and capped in an <i>approved</i> manner. <u>Components of the abandoned system including but not limited to pipe, tubing, fittings, and valves shall not be used for potable water systems.</u></p>							
15-P20	DOH	UPC 1503.1	Reclaimed – General				

1503.1 General. The provisions of this section *shall* apply to the installation, construction, alteration, and repair of reclaimed (recycled) water systems intended to supply uses such as water closets, urinals, *trap primers* for floor *drains* and floor sinks, aboveground and subsurface irrigation, industrial or commercial cooling or air conditioning and other uses *approved* by the *Authority Having Jurisdiction*. Reclaimed water must meet the minimum technology-based treatment and reliability standards required for the use authorized. The authorized uses of reclaimed water shall be listed in the use management plan in the permit issued to the reclaimed water generator by the state of Washington. No other uses shall be allowed, unless approved in an amended permit issued by department of ecology or department of health and allowed by the reclaimed water generator or supplier, or otherwise allowed under state rules for reclaimed water.

15-P21	DOH	UPC 1504.1	Onsite treated – General				
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1504.1 General. The provisions of this section *shall* apply to the installation, construction, alteration, and repair of *onsite treated nonpotable water* systems intended to supply uses such as water closets, urinals, *trap primers* for floor *drains* and floor sinks, ~~above and belowground irrigation,~~ and other uses *approved* by the *Authority Having Jurisdiction*

15-P22	DOH	UPC 1504.7	Gray water – residential				
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1504.7 On-Site Treated Nonpotable Water Devices and Systems. Devices or equipment used to treat ~~*on-site treated nonpotable water*~~ for on-site use in order to maintain the minimum water quality requirements determined by the *Authority Having Jurisdiction shall be listed or labeled* (third-party certified) by a *listing agency* (accredited conformity assessment body) or *approved* for the intended application. Devices or equipment used to treat ~~*gray water or sewage to on-site treated nonpotable water*~~ for use in water closet and urinal flushing, surface irrigation, and similar applications ~~*shall be listed or labeled to NSF 350 oxidize, coagulate, filter and disinfect the gray water or sewage, and be consistent at all times with Washington Class A reclaimed water or better*~~ or and be approved by the Authority Having Jurisdiction.

15-P23	DOH	UPC 1504.10.2	Min. water quality				
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1504.10.2 Minimum Water Quality. *On-site treated nonpotable water* supplied to toilets or urinals or for other uses in which it is sprayed or exposed *shall be disinfected*. Acceptable disinfection methods *shall include* chlorination, ultraviolet sterilization, ozone, or other methods as *approved* by the *Authority Having Jurisdiction*. The minimum water quality after treatment for use in water closet and urinal flushing, surface irrigation, and similar applications shall be the effluent criteria listed in NSF 350, or better ~~The minimum water quality for *on-site treated nonpotable water* systems shall meet the applicable water quality requirements for the intended applications as determined by the public health Authority Having Jurisdiction.~~

15-P24	DOH	UPC 1601.11	Rainwater catchment - abandonment				
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1601.11.1 General. An abandoned system or part thereof covered under the scope of this chapter *shall be disconnected* from remaining systems, drained, plugged, and capped in an *approved* manner. Components of the abandoned system including but not limited to pipe, tubing, fittings, and valves shall not be used for potable water systems.

15-P25	DOH	UPC Appendix K	Potable rainwater catchment				
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Strike Appendix K

Portions of this Appendix are in conflict with Washington State and federal (40 CFR 141) regulations. The state regulations include those for Group A Public Water Supplies (Chapter 246-290 WAC) and Group B Public Water Supplies (Chapter 246-291 WAC), and the federal regulations include the National Primary Drinking Water Regulations (40 CFR Part 141). Specific issues include the following:

- The scope of this section is outside the normal jurisdiction of the Uniform Plumbing Code since following this section would create public water systems subject to State regulation. There are numerous requirements of public water

systems that are simply not addressed by this section. However, the construct of this section gives the reader the false impression that it is a comprehensive overview of the requirements for creating a public water system.

- A definition of a public water system is not provided in Section 218.
- A definition of a private water system is not provided in Section 218.
- The minimum water quality requirements in Table K 104.2(1) and Table K 104.2(2) redefine the sampling requirements for public water systems and are impractical.

15-P26	Chuck Murray	UPC New Appendix	Local conservation				
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APPENDIX (NEW AA)
Water Efficiency and Conservation

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

AA 101 General

AA 101.1 Scope. The provisions of this appendix establish the means of conserving potable and non-potable water used in and around a building.

AA 102.0 Water-Conserving Plumbing Fixtures and Fittings

AA 102.1 General. The maximum water consumption of fixtures and fittings shall comply with the flow rates specified in Table 402.1 and Section 402.2, through Section 402.9 of the [2012 Green Plumbing and Mechanical Code Supplement](#), as published by the International Association of Plumbing and Mechanical Officials.

TAG Review Report Guide

Policies Criteria

WAC 51-04-020 Policies for the consideration of proposed state-wide amendments

- (1) The amendment is needed to address a critical life/safety need.
- (2) The amendment is needed to address a specific state policy or statute.
- (3) The amendment is needed for consistency with state or federal regulations.
- (4) The amendment is needed to address a unique character of the state.
- (5) The amendment corrects errors and omissions.

Objectives Criteria

RCW 19.27.020 Purposes--Objectives--Standards.

- (A) To require minimum performance standards and requirements for construction and construction materials, consistent with accepted standards of engineering, fire and life safety.
- (B) To require standards and requirements in terms of performance and nationally accepted standards.
- (C) To permit the use of modern technical methods, devices and improvements.
- (D) To eliminate restrictive, obsolete, conflicting, duplicating and unnecessary regulations and requirements which could unnecessarily increase construction costs or retard the use of new materials and methods of installation or provide unwarranted preferential treatment to types or classes of materials or products or methods of construction.
- (E) To provide for standards and specifications for making buildings and facilities accessible to and usable by physically disabled persons.
- (F) To consolidate within each authorized enforcement jurisdiction, the administration and enforcement of building codes.

Economic Impact

+	Increases cost	FC	First Cost
-	Decreases cost	OC	Ongoing Cost
SBI	Small Business Impact	EC	Enforcement Cost

Recommendation

AS	Approval as Submitted
D	Disapproval
AM	Approval with Modifications (see attached)
AO	Approval with Options (see attached)



15-P01 (15-E097)

STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

2015 Washington State Energy Code Development
Standard Energy Code Proposal Form

Code being amended: [Commercial](#) Provisions [Residential](#) Provisions
(A MS Word version of the code is linked to the name)

Code Section # New Section C405.10

Brief Description: ASHRAE 90.1-2013 (and 90.1-2010) and the 2012 Seattle energy code regulated service water pressure booster systems that are commonly installed in high rise buildings. This proposal would require these systems, which can operate for extend hours, to regulate pressure utilizing speed control or pump on and off rather than a control valve.

Proposed code change text: (Copy the existing text from the Integrated Draft, linked above, and then use underline for new text and ~~strikeout~~ for text to be deleted.)

C405.10 Service Water Pressure Booster Systems. Service water pressure booster systems shall be designed such that
a. one or more pressure sensors shall be used to vary pump speed and/or start and stop pumps. The sensor(s) shall
either be located near the critical fixture(s) that determine the pressure required, or logic shall be employed that
adjusts the setpoint to simulate operation of remote sensor(s).
b. no device(s) shall be installed for the purpose of reducing the pressure of all of the water supplied by any booster
system pump or booster system, except for safety devices.
c. no booster system pumps shall operate when there is no service water flow.

C405.110 ~~Electrical power and lighting systems commissioning and completion requirements.~~ Electrical power and lighting systems shall be commissioned and completed in accordance with Section C408.

Purpose of code change:

Save energy.

Your amendment must meet one of the following criteria. Select at least one:

- | | |
|--|---|
| <input type="checkbox"/> Addresses a critical life/safety need. | <input type="checkbox"/> Consistency with state or federal regulations. |
| <input checked="" type="checkbox"/> Addresses a specific state policy or statute.
(Note that energy conservation is a state policy) | <input type="checkbox"/> Addresses a unique character of the state. |
| | <input type="checkbox"/> Corrects errors and omissions. |

Check the building types that would be impacted by your code change:

- | | | |
|--|--|---|
| <input type="checkbox"/> Single family/duplex/townhome | <input checked="" type="checkbox"/> Multi-family 4 + stories | <input checked="" type="checkbox"/> Institutional |
| <input type="checkbox"/> Multi-family 1 – 3 stories | <input checked="" type="checkbox"/> Commercial / Retail | <input type="checkbox"/> Industrial |

Your name Mike Kennedy Email address mikekennedy@energysims.com

Your organization NEEA / Mike D Kennedy Inc Phone number 360-301-0098

Other contact name 39T

Instructions: Send this form as an email attachment, along with any other documentation available, to: www.sbcc.ga.wa.gov. For further information, call the State Building Code Council at 360-407-9280. **Deadline for all 2015 code change proposals is March 1, 2015 at 11:59 PM.**

Economic Impact Data Sheet

Briefly summarize your proposal's primary economic impacts and benefits to building owners, tenants and businesses.

Saves energy. Primary cost is increased first cost.

Provide your best estimate of the construction cost (or cost savings) of your code change proposal?

No cost calculation was done. Overall this is a very small incremental project cost. The measure has been vetted by ASHRAE 90.1.

Provide your best estimate of the annual energy savings (or additional energy use) for your code change proposal?

No savings estimate made. The measure has been vetted by ASHRAE 90.1.

List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:

Small amount to verify control of water pressure booster system.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 407.3

(e.g.: Section: R403.2)

Title: Lavatories. Limitation of Hot Water Temperature for Public Lavatories.

(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):**Proponent: Nancy Bernard, Washington State Department of Health, Office of Environmental Health, Safety, and Toxicology****Title: Public Health Advisor****Date: February 27, 2015****3. Designated Contact Person:****Name: John Williams, Washington State Department of Health, Construction Review****Title: Program Manager****Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501****Office Phone: 360-236-2950****Cell:****E-Mail address: john.williams@doh.wa.gov**

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) __407.3 Section(s) __ Lavatories. Limitation of Hot Water Temperature for Public Lavatories._____

Enforceable code language must be used; see an example [by clicking here](#).

Amend section to read as follows:

407.3 Limitation of Hot Water Temperature for Public Lavatories. *Hot water* delivered from *public-use* lavatories *shall* be limited to a maximum temperature of 120°F (49°C) by a device that conforms to ASSE 1070 or CSA B125.3 The *water heater* thermostat *shall* not be considered a suitable control for meeting this provision. Automatically mixed water (where the user cannot adjust the temperature) will be tempered water, between 85°F (29°C) and 105°F (41°C).

- 5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.** Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

Handwashing is the most effective means of controlling communicable disease transmission. The general public is more likely to wash their hands if the water temperature is comfortable. When users could mix the hot and cold water to their own comfort range, the 120 °F as a maximum for hot water scald prevention was all that was necessary.

Now that so many public hand washing and shower fixtures deliver water at only one temperature, it is important that the water not be too hot or cold for use. 120 °F as a maximum for hot water at handwashing and shower/bath taps is for scald protection, and is not a comfortable temperature for hand washing or showering. The IPC has addressed this issue, the UPC continues to not address it.

The UFAS (Uniform Federal Accessibility Standard) sets 105°F as the maximum for automatically controlled water (1988 edition, and ADA (American with Disabilities Act).

Generally, people shower at temperatures between 105 and 110°F. One study showed an average of 107.5°F (<http://www.stanford.edu/group/greendorm/research/water.html>).

For reference, hot tubs should not exceed 104°F (<http://www.cdc.gov/healthywater/pdf/swimming/resources/operating-public-hot-tubs-factsheet.pdf>)

The ASSE International Scald Awareness Task Group white paper: Understanding Potential Water Heater Scald Hazards (revised May 2013) provides further information on this issue. <http://www.asse-plumbing.org/downloads/WaterHeaterScaldHazards.pdf>

- 6. Specify what criteria this proposal meets.** You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

- 7. Is there an economic impact:** Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

	Construction ¹	Enforcement ²	Operations & Maintenance ³
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¹ \$ / square foot of floor area or other cost. Attach data. **Construction** costs are costs prior to occupancy, and include both design and direct construction costs that impact the total cost of the construction to the owner/consumer.

² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

Building Type	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

Please send your completed proposal to: sbcc@ga.wa.gov

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 408.3

(e.g.: Section: R403.2)

Title: Showers. Individual shower and Tub-Shower Combination Control Valves.

(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):**Proponent: Nancy Bernard, Washington State Department of Health, Office of Environmental Health, Safety, and Toxicology****Title: Public Health Advisor****Date: February 27, 2015****3. Designated Contact Person:****Name: John Williams, Washington State Department of Health, Construction Review****Title: Program Manager****Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501****Office Phone: 360-236-2950****Cell:****E-Mail address: john.williams@doh.wa.gov**

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) 408.3 **Section(s)** Showers. Individual shower and Tub-Shower Combination Control Valves.

Enforceable code language must be used; see an example [by clicking here](#).

Amend section to read as follows:

408.3 Shower and Tub-Shower Combination Control Valves. Showers and tub-shower combinations in buildings *shall* be provided with individual control valves of the *pressure* balance, *thermostatic*, or combination *pressure* balance/*thermostatic*, mixing valve type that provide scald and thermal shock protection for the rated flow rate of the installed showerhead. These valves *shall* be installed at the point of use and in accordance with ASSE 1016 or ASME A 112.18.1/CSA B 125.1. *Gang showers*, where supplied with a single temperature-controlled water supply *pipe*, *shall* be controlled by a mixing valve that is in accordance with ASSE 1069. Handle position stops *shall* be provided on such valves and *shall* be adjusted per the manufacturer's instructions to deliver a maximum mixed water setting of 120°F (49°C) between 105°F (40°C) and 110°F (43°C). Where separate hot and cold water is provided, the hot water shall not exceed 120°F (49°C). The water heater thermostat shall not be considered a suitable control for meeting this provision.

5. **Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.** Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

Handwashing is the most effective means of controlling communicable disease transmission. The general public is more likely to wash their hands if the water temperature is comfortable. When users could mix the hot and cold water to their own comfort range, the 120 °F as a maximum for hot water scald prevention was all that was necessary.

Now that so many public hand washing and shower fixtures deliver water at only one temperature, it is important that the water not be too hot or cold for use. 120 °F as a maximum for hot water at handwashing and shower/bath taps is for scald protection, and is not a comfortable temperature for hand washing or showering. The IPC has addressed this issue, the UPC continues to not address it.

The UFAS (Uniform Federal Accessibility Standard) sets 105°F as the maximum for automatically controlled water (1988 edition, and ADA (American with Disabilities Act).

Generally, people shower at temperatures between 105 and 110°F. One study showed an average of 107.5°F (<http://www.stanford.edu/group/greendorm/research/water.html>).

For reference, hot tubs should not exceed 104°F (<http://www.cdc.gov/healthywater/pdf/swimming/resources/operating-public-hot-tubs-factsheet.pdf>)

The ASSE International Scald Awareness Task Group white paper: Understanding Potential Water Heater Scald Hazards (revised May 2013) provides further information on this issue. <http://www.asse-plumbing.org/downloads/WaterHeaterScaldHazards.pdf>

6. **Specify what criteria this proposal meets.** You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. **Is there an economic impact:** Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

Please send your completed proposal to: sbcc@ga.wa.gov

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.

¹ \$ / square foot of floor area or other cost. Attach data. **Construction** costs are costs prior to occupancy, and include both design and direct construction costs that impact the total cost of the construction to the owner/consumer.

² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 507.2

Title: Seismic bracing of water heaters

2. Proponent Name (Specific local government, organization or individual):

Proponent: Dave Cantrell

Title: Chief Plumbing Inspector, Public Health – Seattle & King County

Date: February 13, 2015

3. Designated Contact Person:

Name: Dave Cantrell

Title: Chief Plumbing Inspector, Public Health – Seattle & King County

Address: 401 5th Avenue, Suite 1100, Seattle, WA 98104

Office Phone: (206) 263-8493

Cell: (206) 510-4378

E-Mail address: dave.cantrell@kingcounty.gov

4. Proposed Code Amendment.

Code(s) 2015 Uniform Plumbing Code **Section(s)** 507.2

Amend section to read as follows:

507.2 Seismic Provisions. In seismic design categories ~~C, D, E, and F~~ D0, D1 and D2, and in townhouses in seismic design category C, *water heaters shall* be anchored or strapped to resist horizontal displacement due to earthquake motion. Strapping *shall* be at points within the upper one-third and lower one-third of its vertical dimensions. At the lower point, a distance of not less than 4 inches (102 mm) *shall* be maintained from the controls to the strapping.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.

Creates consistency with the IRC, Section M1307.2.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

Please send your completed proposal to: sbcc@ga.wa.gov

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² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 601.1
(e.g.: Section: R403.2)

Title: Applicability
(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Terri Notestine, PE, Washington State Department of Health, Office of Drinking Water

Title: Senior Engineer Advisor

Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review

Title: Program Manager

Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950

Cell:

E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) 601.1 Section(s) Applicability. _____

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

This chapter *shall* govern the materials, design, and installation of *water supply systems*, including backflow prevention devices, assemblies, and methods and devices used for *backflow* prevention.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

Amended the language for consistency with 603.3 and Table 603.2 and WAC 246-290-490.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

Please send your completed proposal to: sbcc@ga.wa.gov

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.

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² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 609.9

(e.g.: Section: R403.2)

Title: Disinfection of Potable Water System.

(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Terri Notestine, PE, Washington State Department of Health, Office of Drinking Water

Title: Senior Engineer Advisor

Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review

Title: Program Manager

Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950

Cell:

E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) _609.9 (subsection (4))_ Section(s) __Disinfection of Potable Water System. _____

Enforceable code language must be used; see an example [by clicking here](#).

Amend section to read as follows:

(4) The procedure *shall* be repeated ~~where it is shown by~~ when a standard bacteriological examination test for drinking water, performed by a laboratory certified for drinking water in Washington State, made by an approved agency shows unsatisfactory results indicating that contamination persists in the system.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

The requirements in this section need to be clarified. The test should be a bacteriological test for drinking water, and the sample needs to be analyzed by a lab certified for drinking water in Washington State. The suggested language is consistent with amendment language adopted for the 2012 UPC in 1603.11.2.3 and the same language appears in 1604.12.2.3, and 1702.2.3.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

Please send your completed proposal to: sbcc@ga.wa.gov

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STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 611.1

Title: Application.

2. Proponent Name (Specific local government, organization or individual):

Proponent: Scott Torpie, P.E., Washington State Department of Health, Office of Drinking Water

Title: Senior Engineering Advisor

Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review

Title: Program Manager

Address: Town Center 2 111 Israel Road SE Tumwater, WA 98501

Office Phone: 360-236-2950

Cell:

E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) WAC 51-56 Section(s) 611.2

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

611.2 Application. Drinking water treatment units *shall* comply with NSF 42 or NSF 53. Water softeners *shall* comply with NSF 44. Ultraviolet water treatment systems *shall* comply with NSF 55. Reverse osmosis drinking water treatment systems *shall* comply with NSF 58. Drinking water distillation systems *shall* comply with NSF 62. The installation of a water treatment unit on a building that serves the public may result in the building being regulated as a public water system under chapter 246-290 WAC. The applicability of chapter 246-290 WAC shall be determined by the Washington Department of Health, Office of Drinking Water.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

The National Primary Drinking Water Regulations cover any facility that regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year if treatment is installed on the potable water supply to the facility per 40 CFR 141.3 as follows: **Coverage.** This part shall apply to each public water system, unless the public water system meets all of the following conditions:

- (a) Consists only of distribution and storage facilities (and does not have any collection and treatment facilities);
- (b) Obtains all of its water from, but is not owned or operated by, a public water system to which such regulations apply;
- (c) Does not sell water to any person; and
- (d) Is not a carrier which conveys passengers in interstate commerce.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
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² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 612.2

(e.g.: Section: R403.2)

Title: Types of Systems.

(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Terri Notestine, PE, Washington State Department of Health, Office of Drinking Water

Title: Senior Engineer Advisor

Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review

Title: Program Manager

Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950

Cell:

E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) 612.2 Section(s) Types of Systems. _____

Enforceable code language must be used; see an example [by clicking here](#).

Amend section to read as follows:

This section shall apply to stand-alone and multipurpose wet-pipe sprinkler systems that do not include the use of antifreeze. A multipurpose fire sprinkler system shall provide potable water to both fire sprinklers and plumbing fixtures. A stand-alone sprinkler system shall be separate and independent from the potable water distribution system. ~~A backflow preventer shall not be required to separate a stand-alone sprinkler system from the water distribution system where the sprinkler system material is in accordance with the requirements of Section 604.0.~~

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

The 2015 code language exempts in 612.2 residential stand-alone sprinkler systems from backflow prevention requirements. This is inconsistent with the current state amendment in 51-56-0600 Section 603.5.15 and WAC 246-290-490(4)(d)(i). The current UPC amendment language and the drinking water rules both only exempt residential flow-through or combination sprinkler systems piped in materials approved for potable water. We have concerns about the 2015 language due to the potential for microbiological and chemical contaminants to enter the public water system from stagnant water in the stand-alone fire sprinkler system under backflow conditions. We recommend retaining the current amendment language.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

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² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.

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STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
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| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 908.2.4

Title: Water closet connection to horizontal wet venting for a bathroom group

2. Proponent Name (Specific local government, organization or individual):

Proponent: Dave Cantrell

Title: Chief Plumbing Inspector, Public Health – Seattle & King County

Date: February 13, 2015

3. Designated Contact Person:

Name: Dave Cantrell

Title: Chief Plumbing Inspector, Public Health – Seattle & King County

Address: 401 5th Avenue, Suite 1100, Seattle, WA 98104

Office Phone: (206) 263-8493

Cell: (206) 510-4378

E-Mail address: dave.cantrell@kingcounty.gov

4. Proposed Code Amendment.

Code(s) 2015 Uniform Plumbing Code Section(s) 908.2.4

Delete subsection as follows and renumber the remaining subsection(s):

908.2.4 Water Closet. ~~The water closet *fixture drain* or *trap arm* connection to the *wet vent* shall be downstream of *fixture drain* or *trap arm* connections to the horizontal *wet vent*.~~

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.

A new Section 911.0 has been added to the 2015 Uniform Plumbing Code containing provisions for circuit venting, which is another type of horizontal wet venting that previously was contained in an appendix chapter. Where the water closet is not connected downstream of other fixture drains or trap arms when using the provisions of Section 908.2 (horizontal wet venting for a bathroom group), it would still meet the provisions for circuit venting without requiring any change to the installation. There is no substantiation that connecting a water closet upstream of other trap arms or fixture drains in a horizontal wet vent prevents the wet vent from functioning properly, either in a horizontal wet vent for bathroom groups or in circuit venting. These types of systems are common in much of the country and have thus been included in model codes for many years. Keeping this restriction in place for horizontal wet venting of bathroom groups could well result in installations being deemed noncompliant, requiring corrective action and modification to an installation that is compliant with circuit venting in Section 911.0.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

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³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 912.0

(e.g.: Section: R403.2)

Title: Air Admittance Valves

(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):**Proponent: Steven Huff****Title: Mechanical Project Engineer****Date: 3/1/2015****3. Designated Contact Person:****Name: Steven Huff****Title: Mechanical Project Engineer****Address: 1725 Westlake Ave N, Ste 300
Seattle, WA 98109****Office Phone: 206-285-7100****Cell: 206-304-8690****E-Mail address: Stevenh@rushingco.com**

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) Uniform Plumbing Code Section(s) 912

Enforceable code language must be used; see an example [by clicking here](#).

Amend section to read as follows:

912.0: Air Admittance Valves

912.1: Individual and branch line plumbing vents shall be permitted to terminate with a connection to an air admittance valve (AAV) where conventional venting of the fixtures would be impractical or burdensome. AAV's shall only vent fixtures that are on the same floor level and connect to a horizontal branch drain. AAV's shall not be installed in non-neutralized special waste systems as described in Chapter 8 of the Uniform Plumbing Code unless specifically approved for such use by the manufacturer.

912.2: Air admittance valves shall conform to ASSE 1051. AAV's shall be installed in accordance with the requirements of this section and the manufacturer's installation instructions. The AAV shall be rated in accordance with the standard for the size of vent to which it is connected.

912.3: AAV's shall be located a minimum of four (4) inches above the branch drain or trap arm being vented and a minimum of six (6) inches above any insulation material. The AAV shall be located within the maximum developed length permitted for the vent in accordance with Chapter 7, Table 7-5. AAV's shall not be located in spaces utilized as a supply or return air plenum. AAV's shall not be used for venting a sump or ejector pump without written approval of the manufacturer.

912.4: AAV's shall be installed in accessible locations. The valve shall be located within a ventilated space that allows air to enter the valve, such as below a kitchen or bathroom cabinet. The AAV may be installed in a wall only if it is provided with a ventilated access panel and is approved for such installation by the manufacturer.

912.5: Relief Vent: A relief vent is not required on horizontal branch drains which connect to the drainage stack or building drain within four (4) branch intervals (stories) from the top of the stack. All other horizontal branch drains shall be provided with a relief vent that shall extend outdoors to the open air or shall connect to a vent stack or stack vent that terminates outdoors to the open air. The relief vent shall connect to the horizontal branch drain between the stack or building drain and the most downstream fixture drain connected to the horizontal branch drain. The relief vent shall be at least 1/2 the diameter of the drain served, but in no case less than 1 1/4-inch in diameter, and shall be installed in accordance with Section 905.0 and the length limitations of Chapter 7, Table 7-5. The relief vent shall be permitted to serve as a vent for other fixtures.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

Automatic air vents are widely used for venting of plumbing fixtures that are isolated or otherwise impractical or costly to run a conventional vent system to the exterior of the building. This amendment would align state code with an industry standard practice that is currently being allowed by a variable and inconsistent patchwork of local amendments and code interpretations/ judgments throughout the state.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.

The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

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² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1501.1.1

Title: Allowable Use of Alternate Water.

2. Proponent Name (Specific local government, organization or individual):

Proponent: Denise Lahmann, Washington State Department of Health, Wastewater

Management Section

Title: Acting Manager

Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review

Title: Program Manager

Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950

Cell:

E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) _51-56_____ Section(s) 1501.1.1_____

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

1501.1.1 Allowable Use of Alternate Water.

Where *approved* or required by the *Authority Having Jurisdiction, alternate water sources* [reclaimed (recycled) water, gray water, and on-site treated nonpotable water] shall be permitted to be used in lieu of *potable water* for the applications identified in this chapter. Reclaimed (recycled) water shall not be used to flush toilets or for other indoor use in any residential property or dwelling unit where residents have access to plumbing systems for repairs or modifications.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

These changes are made to be consistent with existing Washington statutes, rules, and standards for reclaimed water.

The language is intended to make those using the UPC aware of other oversight (state). Treatment of nonpotable is used-based, with some identifiable public health criteria (the NSF 350 standards for treated effluent – which is what will be reused).

No impacts to business or enforcement are expected, except to eliminate confusion between state rules and the UPC.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

	Construction ¹	Enforcement ²	Operations & Maintenance ³
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¹ \$ / square foot of floor area or other cost. Attach data. **Construction** costs are costs prior to occupancy, and include both design and direct construction costs

Building Type	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

Please send your completed proposal to: sbcc@ga.wa.gov

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that impact the total cost of the construction to the owner/consumer.

² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
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| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1501.2
(e.g.: Section: R403.2)

Title: System Design.
(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Denise Lahmann, Washington State Department of Health, Wastewater Management Section
Title: Acting Manager
Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review
Title: Program Manager
Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501
Office Phone: 360-236-2950
Cell:
E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) 1501.2 **Section(s)** System Design

Enforceable code language must be used; see an example [by clicking here](#).

Amend section to read as follows:

1501.2 System Design. *Alternate water source* systems shall be designed in accordance with this chapter by a *registered design professional* or who demonstrates competency to design the *alternate water source* system as required by the *Authority Having Jurisdiction*. Components, piping, and fittings used in an *alternate water source* system shall be listed.

Exceptions:

~~(1) A registered design professional is not required to design gray water systems having a maximum discharge capacity of 250 gallons per day (gal/d) (0.011 L/s) for single family and multi-family dwellings.~~

~~(2) A registered design professional is not required to design an on-site treated nonpotable water system for single family dwellings having a maximum discharge capacity of 250 gal/d (0.011 L/s).~~

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.

Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

These changes are made to be consistent with existing Washington statutes, rules, and standards for greywater.

No impacts to business or enforcement are expected, except with respect to make the UPC consistent with existing state requirements, to eliminate confusion.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

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² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.

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STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
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| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): Table 1501.5

(e.g.: Section: R403.2)

Title: Minimum Alternate Water Source Testing, Inspection, And Maintenance Frequency

(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Denise Lahmann, Washington State Department of Health, Wastewater

Management Section

Title: Acting Manager

Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review

Title: Program Manager

Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950

Cell:

E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) Table 1501.5 Section(s) Minimum Alternate Water Source Testing, Inspection, And Maintenance Frequency

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

**TABLE 1501.5
MINIMUM ALTERNATE WATER SOURCE TESTING, INSPECTION, AND MAINTENANCE FREQUENCY**

DESCRIPTION	MINIMUM FREQUENCY
Inspect and clean filters and screens, and replace (where necessary).	Every 3 months
Inspect and verify that disinfection, filters and water quality treatment devices and systems are operational and maintaining minimum water quality requirements as determined by the Authority Having Jurisdiction.	In accordance with manufacturer's instructions, and the Authority Having Jurisdiction.
Inspect pumps and verify operation.	After initial installation and every 12 months thereafter
Inspect valves and verify operation.	After initial installation and every 12 months thereafter
Inspect pressure tanks and verify operation.	After initial installation and every 12 months thereafter
Clear debris from and inspect storage tanks, locking devices, and verify operation.	After initial installation and every 12 months thereafter
Inspect caution labels and marking.	After initial installation and every 12 months thereafter
Inspect and maintain mulch basins for gray water irrigation systems.	As needed to maintain mulch depth and prevent ponding and runoff.
Cross-connection inspection and test*	After initial installation and every 12 months thereafter

* The *cross-connection* test shall be performed in the presence of the Authority Having Jurisdiction in accordance with the requirements of this chapter.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

These changes are made to be consistent with existing Washington statutes, rules, and standards for greywater.

No impacts to business or enforcement are expected, except with respect to making the UPC consistent with existing state requirements, to eliminate confusion.

6. Specify what criteria this proposal meets. You may select more than one.

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- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

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³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1501.5.2
(e.g.: Section: R403.2)

Title: Maintenance Log.
(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Denise Lahmann, Washington State Department of Health, Wastewater Management Section
Title: Acting Manager
Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review
Title: Program Manager
Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501
Office Phone: 360-236-2950
Cell:
E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) 1501.5.2 **Section(s)** Maintenance Log.

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

1501.5.2 Maintenance Log. A maintenance log for ~~gray water~~ and *on-site treated nonpotable water* systems is required to have a permit in accordance with Section 1501.3 and *shall* be maintained by the property owner and be available for inspection. The property owner or designated appointee *shall* ensure that a record of testing, inspection and maintenance in accordance with Table 1501.5 is maintained in the log. The log will indicate the frequency of inspection and maintenance for each system.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

These changes are made to be consistent with existing Washington statutes, rules, and standards for greywater.

No impacts to business or enforcement are expected, except with respect to make the UPC consistent with existing state requirements, to eliminate confusion.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
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- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
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Single family						
Multi-family						
Commercial/Retail						
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² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

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|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1501.6
(e.g.: Section: R403.2)

Title: Operation and Maintenance Manual.
(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Denise Lahmann, Washington State Department of Health, Wastewater Management Section
Title: Acting Manager
Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review
Title: Program Manager
Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950
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E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) _____ 1501.6 _____ Section(s) _____ Operation and Maintenance Manual.

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

1501.6 Operation and Maintenance Manual. An operation and maintenance manual for ~~gray water and~~ onsite treated water systems required to have a permit in accordance with Section 1501.3 shall be supplied to the building owner by the system designer. The operating and maintenance manual shall include the following:

- (1) Detailed diagram of the entire system and the location of system components.
- (2) Instructions on operating and maintaining the system.
- (3) Details on maintaining the required water quality as determined by the *Authority Having Jurisdiction*.
- (4) Details on deactivating the system for maintenance, repair, or other purposes.
- (5) Applicable testing, inspection, and maintenance frequencies in accordance with Table 1501.5.
- (6) A method of contacting the manufacturer(s).

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

These changes are made to be consistent with existing Washington statutes, rules, and standards for greywater.

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7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
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Single family						
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⁴ Measurable benefit.

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STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
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| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1501.7

Title: Minimum water quality requirements for gray water reuse

2. Proponent Name (Specific local government, organization or individual):

Proponent: Dave Cantrell

Title: Chief Plumbing Inspector, Public Health – Seattle & King County

Date: February 13, 2015

3. Designated Contact Person:

Name: Dave Cantrell

Title: Chief Plumbing Inspector, Public Health – Seattle & King County

Address: 401 5th Avenue, Suite 1100, Seattle, WA 98104

Office Phone: (206) 263-8493

Cell: (206) 510-4378

E-Mail address: dave.cantrell@kingcounty.gov

4. Proposed Code Amendment.

Code(s) 2015 Uniform Plumbing Code **Section(s)** 1501.7

Amend section to read as follows:

1501.7 Minimum Water Quality Requirements. The minimum water quality for *alternate water source* systems shall meet the applicable water quality requirements for the intended application as determined by the *Authority Having Jurisdiction*. In the absence of water quality requirements, the EPA/625/R-04/108 contains recommended water reuse guidelines to assist regulatory agencies develop, revise, or expand *alternate water source* water quality standards.

Exception: ~~Water treatment is not required for gray water used for subsurface irrigation.~~ The treatment for gray water shall be oxidized, coagulated, filtered and disinfected, and consistent at all times with Class A reclaimed water or better.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.

Gray water used for subsurface irrigation comes under the authority of the Washington State Department of Health. For this reason, the plumbing code provisions addressing gray water for subsurface irrigation have long been deleted by state amendment. Additionally, Chapter 246-274 WAC, which governs greywater for subsurface irrigation, requires treatment for some types of systems and in certain locations. Therefore, the exception in Section 1501.7 would violate the Washington State Health Code.

The new language being proposed is found in Section 11(d) of the Water Reclamation and Reuse Standards, September 1997, applicable to the State of Washington under the authority of both the Washington State Department of Health and the Washington State Department of Ecology. Therefore, use of gray water to flush toilets and urinals must meet these state requirements.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

Please send your completed proposal to: sbcc@ga.wa.gov

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.

¹ \$ / square foot of floor area or other cost. Attach data. **Construction** costs are costs prior to occupancy, and include both design and direct construction costs that impact the total cost of the construction to the owner/consumer.

² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1501.7
(e.g.: Section: R403.2)

Title: Minimum Water Quality Requirements.
(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Denise Lahmann, Washington State Department of Health, Wastewater Management Section
Title: Acting Manager
Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review
Title: Program Manager
Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950
Cell:
E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) _____ 1501.7 _____ Section(s) __Minimum Water Quality Requirements.__

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

1501.7 Minimum Water Quality Requirements. The minimum water quality for *alternate water source* systems shall meet the applicable water quality requirements for the intended application as determined by the public health Authority Having Jurisdiction. In the absence of water quality requirements, the EPA/625/R-04/108 contains recommended water reuse guidelines to assist regulatory agencies develop, revise, or expand *alternate water source* water quality standards.
~~Exception: Water treatment is not required for gray water used for subsurface irrigation.~~

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

Restores language from 2012 UPC.

These changes are made to be consistent with existing Washington statutes, rules, and standards for greywater.

No impacts to business or enforcement are expected, except with respect to make the UPC consistent with existing state requirements, to eliminate confusion.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
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Single family						
Multi-family						
Commercial/Retail						
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³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.

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STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
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| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1501.12

Title: Gray water reuse in residential construction

2. Proponent Name (Specific local government, organization or individual):

Proponent: Dave Cantrell

Title: Chief Plumbing Inspector, Public Health – Seattle & King County

Date: February 13, 2015

3. Designated Contact Person:

Name: Dave Cantrell

Title: Chief Plumbing Inspector, Public Health – Seattle & King County

Address: 401 5th Avenue, Suite 1100, Seattle, WA 98104

Office Phone: (206) 263-8493

Cell: (206) 510-4378

E-Mail address: dave.cantrell@kingcounty.gov

4. Proposed Code Amendment.

Code(s) 2015 Uniform Plumbing Code Section(s) 1501.12

Amend section to read as follows:

1501.12 Separation Requirements. Underground *alternate water source service piping* other than *gray water* shall be separated from the *building sewer* in accordance with this *code*. Treated nonpotable water *pipes* shall be permitted to be run or laid in the same trench as *potable water pipes* with a 12 inch (305 mm) minimum vertical and horizontal separation where both *pipe* materials are *approved* for use within a *building*. Where horizontal piping materials do not comply with this requirement the minimum separation shall be increased to 60 inches (1524 mm). The *potable water* piping shall be installed at an elevation above the treated nonpotable water piping.

Gray water may be used to flush water closets and urinals, including within residential property or dwelling units, but only where the residents do not have access to the plumbing system for repairs or modifications.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.

This requirement is found in Section 11(d) of the Water Reclamation and Reuse Standards, September 1997, applicable to the State of Washington under the authority of both the Washington State Department of Health and the Washington State Department of Ecology. Therefore, use of gray water to flush toilets and urinals must meet these state requirements.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
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Institutional						

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² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
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| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1501.13
(e.g.: Section: R403.2)

Title: Abandonment.
(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Terri Notestine, PE, Washington State Department of Health, Office of Drinking Water

Title: Senior Engineer Advisor

Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review

Title: Program Manager

Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950

Cell:

E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) 1501.13 Section(s) Abandonment. _____

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

1501.13.1 General. An abandoned system or part thereof covered under the scope of this chapter *shall* be disconnected from remaining systems, drained, plugged, and capped in an *approved* manner. Components of the abandoned system including but not limited to pipe, tubing, fittings, and valves shall not be used for potable water systems.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

We support the 2015 UPC language because it is more detailed and may be more protective of public health. We suggest retaining the 2012 Abandonment language (1601.10) clarifying that components of an abandoned system including but not limited to pipe, tubing, fittings, and valves shall not be used for potable water systems. This will help protect public health by ensuring that components of an abandoned alternate water source system are not reused for potable water applications and is consistent with the amendment language for the 2012 UPC.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

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² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
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| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1503.1

Title: General

2. Proponent Name (Specific local government, organization or individual):

Proponent: Denise Lahmann, Washington State Department of Health, Wastewater Management Section

Title: Acting Manager

Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review

Title: Program Manager

Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950

Cell:

E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) _____ 1503.1 _____ Section(s) _____ General _____

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

1503.1 General. The provisions of this section *shall* apply to the installation, construction, alteration, and repair of reclaimed (recycled) water systems intended to supply uses such as water closets, urinals, *trap primers* for floor *drains* and floor sinks, aboveground and subsurface irrigation, industrial or commercial cooling or air conditioning and other uses *approved* by the *Authority Having Jurisdiction*. Reclaimed water must meet the minimum technology-based treatment and reliability standards required for the use authorized. The authorized uses of reclaimed water shall be listed in the use management plan in the permit issued to the reclaimed water generator by the state of Washington. No other uses shall be allowed, unless approved in an amended permit issued by department of ecology or department of health and allowed by the reclaimed water generator or supplier, or otherwise allowed under state rules for reclaimed water.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

These changes are made to be consistent with existing Washington statutes, rules, and standards for reclaimed water.

The language is intended to make those using the UPC aware of other oversight (state). Treatment of nonpotable is used-based, with some identifiable public health criteria (the NSF 350 standards for treated effluent – which is what will be reused).

No impacts to business or enforcement are expected, except to eliminate confusion between state rules and the UPC.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						

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³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.

Commercial/Retail						
Industrial						
Institutional						

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STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1504.1
(e.g.: Section: R403.2)

Title: General.
(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Denise Lahmann, Washington State Department of Health, Wastewater Management Section
Title: Acting Manager
Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review
Title: Program Manager
Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950
Cell:
E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) 1504.1 **Section(s)** General.

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

1504.1 General. The provisions of this section *shall* apply to the installation, construction, alteration, and repair of *onsite treated nonpotable water* systems intended to supply uses such as water closets, urinals, *trap primers* for floor drains and floor sinks, ~~above and belowground irrigation~~, and other uses *approved by the Authority Having Jurisdiction*

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

This deletion was adopted for the 2012 UPC

These changes are made to be consistent with existing Washington statutes, rules, and standards for greywater.

No impacts to business or enforcement are expected, except with respect to making the UPC consistent with existing state requirements, to eliminate confusion.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
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Commercial/Retail						
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³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1504.7
(e.g.: Section: R403.2)

Title: Gray water reuse in residential construction.
(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Denise Lahmann, PE, Washington State Department of Health, Office of Wastewater Management
Title: Senior Engineer Advisor
Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review
Title: Program Manager
Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950
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E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) 1504.7 Section(s) Gray water reuse in residential construction. _____

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

1504.7 On-Site Treated Nonpotable Water Devices and Systems. Devices or equipment used to treat ~~on-site treated~~ nonpotable water for on-site use in order to maintain the minimum water quality requirements determined by the *Authority Having Jurisdiction* shall be listed or labeled (third-party certified) by a *listing agency* (accredited conformity assessment body) or approved for the intended application. Devices or equipment used to treat gray water or sewage ~~to on-site treated nonpotable water~~ for use in water closet and urinal flushing, surface irrigation, and similar applications shall ~~be listed or labeled to NSF 350~~ oxidize, coagulate, filter and disinfect the gray water or sewage, and be consistent at all times with Washington Class A reclaimed water or better ~~or~~ and be approved by the *Authority Having Jurisdiction*.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

This requirement for Class A or better water is in the Water Reclamation and Reuse Standards, September 1997, applicable to the State of Washington under the authority of both the Washington State Department of Health and the Washington State Department of Ecology for uses that include possible human exposure. Therefore, use of gray water or sewage to flush toilets and urinals, surface irrigate, and similar applications must meet these state requirements.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

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³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.

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STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1504.10.2

Title: Minimum Water Quality.

2. Proponent Name (Specific local government, organization or individual):

Proponent: Denise Lahmann, Washington State Department of Health, Wastewater Management Section

Title: Acting Manager

Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review

Title: Program Manager

Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950

Cell:

E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) _____ 1504.10.2 _____ Section(s) __Minimum Water Quality_____

Enforceable code language must be used; see an example [by clicking here](#).

Amend section to read as follows:

1504.10.2 Minimum Water Quality. *On-site treated nonpotable water* supplied to toilets or urinals or for other uses in which it is sprayed or exposed *shall* be disinfected. Acceptable disinfection methods *shall* include chlorination, ultraviolet sterilization, ozone, or other methods as *approved* by the *Authority Having Jurisdiction*. The minimum water quality after treatment for use in water closet and urinal flushing, surface irrigation, and similar applications shall be the effluent criteria listed in NSF 350, or better ~~The minimum water quality for on-site treated nonpotable water systems shall meet the applicable water quality requirements for the intended applications as determined by the public health Authority Having Jurisdiction.~~

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

These changes are made to be consistent with existing Washington statutes, rules, and standards for reclaimed water.

The language is intended to make those using the UPC aware of other oversight (state). Treatment of nonpotable is used-based, with some identifiable public health criteria (the NSF 350 standards for treated effluent – which is what will be reused).

No impacts to business or enforcement are expected, except to eliminate confusion between state rules and the UPC.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						

¹ \$ / square foot of floor area or other cost. Attach data. **Construction** costs are costs prior to occupancy, and include both design and direct construction costs that impact the total cost of the construction to the owner/consumer.

² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.

Institutional						
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Please send your completed proposal to: sbcc@ga.wa.gov

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): 1601.11
(e.g.: Section: R403.2)

Title: Abandonment.
(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Terri Notestine, PE, Washington State Department of Health, Office of Drinking Water

Title: Senior Engineer Advisor

Date: February 27, 2015

3. Designated Contact Person:

Name: John Williams, Washington State Department of Health, Construction Review

Title: Program Manager

Address: Town Center 2, 111 Israel Road SE, Tumwater, WA 98501

Office Phone: 360-236-2950

Cell:

E-Mail address: john.williams@doh.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) 1601.11 Section(s) Abandonment. _____

Enforceable code language must be used; see an example [by clicking here](#).
Amend section to read as follows:

1601.11.1 General. An abandoned system or part thereof covered under the scope of this chapter *shall* be disconnected from remaining systems, drained, plugged, and capped in an *approved* manner. Components of the abandoned system including but not limited to pipe, tubing, fittings, and valves shall not be used for potable water systems.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

We support the 2015 UPC language because it is more detailed and may be more protective of public health. We suggest retaining the 2012 Abandonment language (1702.12) clarifying that components of an abandoned system including but not limited to pipe, tubing, fittings, and valves shall not be used for potable water systems. This will help protect public health by ensuring that components of an abandoned alternate water source system (rainwater catchment) are not reused for potable water applications and is consistent with the amendment language for the 2012 UPC.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
Commercial/Retail						
Industrial						
Institutional						

Please send your completed proposal to: sbcc@ga.wa.gov

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² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.

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STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s):

Appendix K

Title:

Potable Rainwater Catchment Systems

2. Proponent Name (Specific local government, organization or individual):**Proponent:** Sam Perry, P.E., Washington State Department of Health, Office of Drinking Water**Title:** Senior Engineering Advisor**Date:** February 27, 2015**3. Designated Contact Person:****Name:** John Williams, Washington State Department of Health, Construction Review**Title:** Program Manager**Address:** Town Center 2 111 Israel Road SE Tumwater, WA 98501**Office Phone:** 360-236-2950**Cell:****E-Mail address:** john.williams@doh.wa.gov

- 4. Proposed Code Amendment.**
- Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert
- new
- sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC
- [website](#)
-)

Code(s) WAC 51-56 **Section(s)** Appendix KEnforceable code language must be used; see an example [by clicking here](#).

Amend section to read as follows:

Delete Appendix K from the UPC (see explanation below).

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

Portions of this Appendix are in conflict with Washington State and federal (40 CFR 141) regulations. The state regulations include those for Group A Public Water Supplies (Chapter 246-290 WAC) and Group B Public Water Supplies (Chapter 246-291 WAC), and the federal regulations include the National Primary Drinking Water Regulations (40 CFR Part 141). Specific issues include the following:

- The scope of this section is outside the normal jurisdiction of the Uniform Plumbing Code since following this section would create public water systems subject to State regulation. There are numerous requirements of public water systems that are simply not addressed by this section. However, the construct of this section gives the reader the false impression that it is a comprehensive overview of the requirements for creating a public water system.
- A definition of a public water system is not provided in Section 218.
- A definition of a private water system is not provided in Section 218.
- The minimum water quality requirements in Table K 104.2(1) and Table K 104.2(2) redefine the sampling requirements for public water systems and are impractical.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ¹		Enforcement ²		Operations & Maintenance ³	
	Costs	Benefits ⁴	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family						
Multi-family						
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² Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement.

³ Cost to building owner/tenants over the life of the project.

⁴ Measurable benefit.

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STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

1. State Building Code to be Amended:

- | | |
|---|---|
| <input type="checkbox"/> International Building Code | <input type="checkbox"/> State Energy Code |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code | <input type="checkbox"/> International Mechanical Code |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> International Fuel Gas Code |
| <input type="checkbox"/> International Residential Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code |
| <input type="checkbox"/> International Fire Code | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> Uniform Plumbing Code | <input type="checkbox"/> Wildland Urban Interface Code |

Section(s): New Appendix

Title: Water Efficiency and Conservation for Local Adoption

2. Proponent Name (Specific local government, organization or individual):

Proponent: City of Mercer Island, Bruce Bassett

Title: Mayor

Date: February 25, 2015

3. Designated Contact Person:

Name:	Tana Senn	Chuck Murray
Title:	State Representative, 41st LD	SR Energy Policy Specialist
Address:	Box 40600 Olympia 98504	Box 43173 Olympia 98504
Office Phone:	(360) 786-7894	360 725-3113
Cell:		
E-Mail address:	Tana.senn@leg.wa.gov	chuck.murray@commerce.wa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code additional pages may be attached. (Examples on the SBCC [website](#))

Code(s) Uniform Plumbing Code, 51-56 WAC **Section(s)** New Appendix

Enforceable code language must be used; see an example [by clicking here](#). Amend section to read as follows:

APPENDIX (NEW AA)
Water Efficiency and Conservation

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

AA 101 General

AA 101.1 Scope. The provisions of this appendix establish the means of conserving potable and non-potable water used in and around a building.

AA 102.0 Water-Conserving Plumbing Fixtures and Fittings

AA 102.1 General. The maximum water consumption of fixtures and fittings shall comply with the flow rates specified in Table 402.1 and Section 402.2, through Section 402.9 of the 2012 Green Plumbing and Mechanical Code Supplement, as published by the International Association of Plumbing and Mechanical Officials.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

The proposed plumbing code change will allow local jurisdictions to adopt water fixture efficiency standards that are more stringent than the Federal standards currently referenced in the Uniform Plumbing Code as adopted by the Washington State Building Code Council. This proposal allows local jurisdictions to adopt the water conservation standards as published in the 2012 Green Plumbing and Mechanical Code supplement, Published by IAPMO as an alternate to the base code.

In 2010, DOE officially waived preemption for plumbing products, allowing states to set standards provided they are more stringent than the 1994 federal standards.¹ This includes the option to allow local jurisdiction to adopt more stringent standards. Washington must make this modification before local jurisdictions can adopt lower water efficiency standards.

¹ DOE Appliance Standards web site, Feb, 24, 2015.
http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/29#

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

Explain:

Cost and Savings:

To provide first cost and consumer savings estimates, Table 2 from the California Energy Commission (CEC) Staff Analysis of Toilets, Urinals and Faucets has been included².

Cost for Construction, \$0. With respect to first cost, the CEC research has concluded that there is no incremental cost for water efficient fixtures.

Cost for Enforcement, Not \$0. Jurisdictions choosing to adopt this provision will need to add this item to their field inspection requirements. Most fixtures are permanently labeled with the water flow rates making this additional item easy to inspect.

Operations Benefits to Consumers and Serving Utilities:

Savings included in Table 2 include water savings, energy savings for heating water, and the embedded energy savings for the delivery of water incurred by the serving utility. These figures are per fixture.

Table 2: Unit Water and Energy Savings and Cost-Effectiveness

Individual Appliance Savings								
	Design Life (years)	Water Savings (gal/yr)	Nat. Gas Savings (therms)	Heating Energy Savings (kWh/yr)	Embedded Energy Savings (kWh/yr)	Incremental Cost (\$)	Average Annual Savings (\$)	Life Cycle Benefit (\$)
Residential Toilets	25	646	N/A	N/A	6	0	1.82	45.5
Commercial Toilets	12	245	N/A	N/A	2	0	1.82	22.8
Urinals	12	1357	N/A	N/A	14	0	10.07	121
Residential Faucets	10	823	3	12	8	0	7.21	72.1
Kitchen Faucets	10	2154	7	33	22	0	18.28	183
Public Faucets	3	3598	12	No	36	0	40.74	122

Source: CASE reports, as modified by staff (see Appendix B for assumptions)

As well as demonstrated benefits to consumers, there are savings to serving utilities. One example of the value utility rebates provided for the use of low fixtures. For example, the Cascade Water Alliance provides \$75 rebates for the low flow toilets meeting the proposed standard. Another reference directly related to the

² California Energy Commission Staff Analysis of Toilets, Urinals and Faucets, 2014.
<http://www.energy.ca.gov/2014publications/CEC-400-2014-007/CEC-400-2014-007-SD.pdf>

value to utilities is documented in the following paragraphs from Seattle Public Utilities, Water Conservation Potential Assessment Update, 2004.

The indirect benefits from water conservation for energy, stormwater, and wastewater were determined to be: 1) reduced demand for energy from Seattle City Light and Puget Sound Energy; and 2) a reduction in the sizing of Sanitary Sewer Overflow (SSO) and Combined Sewer Overflow (CSO) facilities by Seattle Public Utilities. Another possible indirect benefit would be to King County wastewater facilities and operations.

The present value of indirect benefits is made up of two components: wastewater/stormwater and energy benefits. The wastewater/stormwater benefit was defined as the savings to utilities from a delay in the need to invest in CSO/SSO storage facilities valued at \$6/gallon. The energy benefits are the energy savings from hot water. Energy savings for the region was based on the avoided cost of electricity valued by Seattle City Light at \$36/kwh³.

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Building Type	Construction ⁴		Enforcement ⁵		Operations & Maintenance ⁶	
	Costs	Benefits ⁷	Costs	Benefits ⁴	Costs	Benefits ⁴
Residential						
Single family	0	0	> 0	0	0	>0
Multi-family	0	0	> 0	0	0	>0
Commercial/Retail	0	0	> 0	0	0	>0
Industrial	0	0	> 0	0	0	>0
Institutional	0	0	> 0	0	0	>0

Please send your completed proposal to: sbcc@ga.wa.gov

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.

³ Seattle Public Utilities, Water Conservation Potential Assessment Update, 2004.

http://www.seattle.gov/Util/cs/groups/public/@spu/@water/documents/webcontent/cos_004245.pdf

⁴ \$ / square foot of floor area or other cost. Attach data. **Construction** costs are costs prior to occupancy, and include both design and direct construction costs that impact the total cost of the construction to the owner/consumer.

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